April 30, 2001

**MEMORANDUM**

**TO:** Katherine B. Kelly, Administrator
State Air Quality Division

**FROM:** Robert Baldwin, Air Quality Engineer
Process Engineering, Technical Services Office

**THROUGH:** Shawnee Y. Chen, P.E., Staff Engineer
Technical Services Office

**SUBJECT:** *TECHNICAL ANALYSIS FOR TIER I OPERATING PERMIT (#057-00008)*
T1-9501-013-1, Bennett Lumber Products, Inc., Princeton, Idaho
(Final Tier I Operating Permit)

| | |
|---|---|
| **Permittee:** | Bennett Lumber Products Inc. |
| **Permit Number:** | 057-00008 |
| **Standard Industrial Classification:** | 2421 |
| **Description:** | Dimensional Lumber Production |
| **Kind of Products:** | Lumber, Wood Chips, Hog Fuel, Wood Shavings |
| **Responsible Official:** | Frank R. Bennett, Plant Manager |
| **Person to Contact:** | Jeff Abbott |
| **Telephone Number:** | (208) 875-1121 |
| **# of Full-time Employees** | 160 |
| **Area of Operation:** | 173.9 acres |
| **Facility Classification:** | A |
| **County:** | Latah |
| **Air Quality Control Region:** | 62 |
| **UTM Coordinates:** | 517.4, 5195.7 |
| **Exact Plant Location:** | Highway 6, 3 miles east of Princeton, Idaho |

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## PUBLIC COMMENT / EPA REVIEW

A 30-day public comment period for the Bennett Lumber Products, Inc. draft Tier I operating permit (OP) was held from February 9, 2000 to March 10, 2000 in accordance with IDAPA 58.01.01.364 (*Rules for the Control of Air Pollution in Idaho*). No comments were received from any affected state. Comments were received from EPA and the facility via their consultant. A hearing was not requested.

After the public comment period, EPA was sent the proposed OP and the technical analysis memorandum for their 45-day review period. EPA did not provide any comments on the permit.

## LIST OF ACRONYMS

| | |
|---|---|
| ACFM | Actual Cubic Feet Per Minute |
| AFS | AIRS Facility Subsystem |
| AIRS | Aerometric Information Retrieval System |
| AQCR | Air Quality Control Region |
| CFR | Code of Federal Regulations |
| CO | Carbon Monoxide |
| DEQ | Idaho Department of Environmental Quality |
| dscf | Dry Standard Cubic Feet |
| EF | Emission Factor |
| EPA | United States Environmental Protection Agency |
| gpm | Gallons Per Minute |
| gr | Grain (1 lb = 7,000 grains) |
| HAPs | Hazardous Air Pollutants |
| IDAPA | Idaho Administrative Procedures Act |
| km | Kilometer |
| lb/hr | Pound Per Hour |
| MMBtu | Million British Thermal Units |
| NESHAP | Nation Emission Standards for Hazardous Air Pollutants |
| $NO_2$ | Nitrogen Dioxide |
| $NO_X$ | Nitrogen Oxides |
| NSPS | New Source Performance Standards |
| $O_3$ | Ozone |
| PM | Particulate Matter |
| $PM_{10}$ | Particulate Matter with an Aerodynamic Diameter of 10 Micrometers or Less |
| ppm | Parts Per Million |
| PSD | Prevention of Significant Deterioration |
| PTC | Permit To Construct |
| PTE | Potential To Emit |
| SCC | Source Classificaiton Code |
| scf | Standard Cubic Feet |
| $SO_2$ | Sulfur Dioxide |
| TSP | Total Suspended Particulates |
| T/yr | Tons Per Year |
| $\mu$m | Micrometers |
| VE | Visible Emissions |
| VOC | Volatile Organic Compound |

## 1. PURPOSE

The purpose of this memorandum is to set out the legal and factual basis for this final Tier I operating permit (OP) in accordance with IDAPA 58.01.01.362, *Rules for the Control of Air Pollution in Idaho (Rules).*

The Idaho Department of Environmental Quality (DEQ) staff has reviewed the information provided by Bennett Lumber Products, Inc. (Bennett) regarding the operation of the Bennett Lumber Products, Inc. facility located near Princeton, Idaho. This information was submitted on the requirements of the Tier I OP in accordance with IDAPA 58.01.01.300 of the *Rules.*

Based on the information submitted, DEQ has drafted a Tier I OP for Bennett. The permit has been submitted for public comment. This proposed permit is being forwarded to the United States Environmental Protection Agency (EPA) for their review in accordance with IDAPA 58.01.01.366 *(Rules).*

Bennett Lumber Products has been identified as operating out of compliance because of failure to obtain a Permit to Construct (PTC) for initial construction and subsequent modifications of various emission units. DEQ will resolve these compliance issues through issuance of a Tier II OP. As required by IDAPA 58.01.01.314.10, a compliance schedule for the Tier II OP was developed and included with the Tier I OP.

## 2. SUMMARY OF EVENTS

On January 20, 1995, DEQ received the Tier I OP application from Bennett for their dimensional lumber mill located in Princeton, Idaho. On April 19, 1995, DEQ received additional information on the cyclones. In November of 1995, DEQ received a revised application. On December 14, 1995, DEQ received a letter from Bennett releasing all information sent to DEQ in their application from being confidential. On December 4, 1998, DEQ received information and an update of the application from Bennett. On February 3, 1999, the updated application was determined administrative complete. The comment period for Bennett's draft permit was from February 19, 2000 to March 10, 2000. Comments were received from EPA and from the facility via their consultant, Hoy Environmental. All permit comments have been addressed.

After the public comment period/hearing, EPA was sent the proposed OP and the technical analysis memorandum for their 45-day review period. EPA did not provide any comments on the permit.

## 3. BASIS OF THE ANALYSIS

The following documents were relied upon in preparing this memorandum and the Tier I OP:

- Tier I OP application, received January 20, 1995; and supplemental application materials received on April 19, 1995; November 1995; December 14, 1995, and December 4, 1998.
- Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, January 1995, Office of Air Quality Planning and Standards, United States Environmental Protection Agency.
- Guidance developed by EPA and DEQ.
- Title V permits issued by other jurisdictions.
- Documents and procedures developed in the Title V Pilot Operating Permit Program.

# 4. REGULATORY ANALAYSIS – GENERAL FACILITY

## 4.1 FACILITY DESCRIPTION

### 4.1.1 General Process Description

Bennett is a saw and planing mill that manufactures dimensional lumber. It is located in Princeton, Idaho. The saw and planing mill operates in two (2) shifts, five (5) days a week, fifty (50) weeks a year (assumed 4500 annual operating hours). There are one sawmill and two (2) planing mills. The boiler operates continuously except during one week of shutdown for maintenance.

Bennett emissions are mainly particulate matter (PM) and carbon monoxide. The total PM and carbon monoxide emissions are in excess of 100 tons per year, thereby classifying the facility as a major facility under IDAPA 58.01.01.008.10., *(Rules)*. Bennett's emissions are mainly from one boiler, six (6) kilns, and eight (8) cyclones or cyclone/baghouse combinations. The wigwam burner that was previously in operation has been discontinued. In addition, there are several fugitive emission sources.

Bennett's production varies with the species of wood being processed and other factors, but the operation is capable of producing approximately one hundred two (102) million board feet of lumber annually. The product is usually dimension lumber (two (2)-inches and smaller) and is kiln-dried. However, the permit assumes annual rates of one hundred-two (102) million board feet lumber scale and (60) million board feet log scale.

Logs are sorted in the woods by species and, to some degree, by size. Logs are debarked in a debarker. Debarked logs are directed to a band saw/chipper. Band saws and chippers square the log on two sides, producing slabs and chips in the process. Squared logs called cants are directed to band saws that reduce them to dimension lumber.

Approximately thirty thousand (30,000) bone dry tons (BDT) of bark come through the log debarkers each year. Approximately sixty-three thousand (63,000) BDT of sawdust and chips are produced in the same operation each year.

Most lumber is dried to a pre-determined moisture level in a series of steam-heated kilns before being sent to the planing mill for surfacing and final finishing. The planning mill generates shavings that are transferred to the shaving truck bin. The surfaced lumber is graded for quality and sent to trim saws to remove defect trim pieces. Figure 1 of Appendix A shows the process flow schematic of Bennett as presented by the consultant, Hoy Environmental, Inc.

### 4.1.2 Facility Classification

The facility is classified as A, in accordance with IDAPA 58.01.01.008.10, for Tier I permitting purposes because the facility has the potential to emit (PTE) Particulate Matter ($PM_{10}$) and Carbon Monoxides (CO) at over 100 tons per year. The facility is also major as defined in IDAPA 58.01.01.007.5; but is not subject to Prevention of Significant Deterioration (PSD) permitting requirements because the facility's emission unit was constructed in 1978.

### 4.1.3 Area Classification

The facility is located within Air Quality Control Region (AQCR) 62 and is located in Latah, which is classified as attainment for all federal and state criteria pollutants (i.e., $SO_2$, $NO_X$, CO, $PM_{10}$, $O_3$, fluorides, and lead). There are no Class I areas within 10 km of the facility.

### 4.1.4 Permitting History

The following was derived from a review of the source file:

March 5, 1977 DEQ received an application for a PTC from Bennett for a boiler at the Princeton facility.

June 1, 1977 DEQ issued Bennett the PTC.

May 29, 1996 DEQ received a PTC facility-wide application.

The facility has one existing PTC. Through a September 20, 2000, DEQ inspection, Bennett Lumber Products was observed operating out of compliance with the *Rules* for failure to obtain a PTC for initial construction and all subsequent modifications of various emission units. DEQ has determined that PTC compliance issues would be addressed through issuance of a Tier II OP, issued after the issuance of this Tier I OP. The Tier I OP will then be modified to include the provisions of the Tier II OP, as per IDAPA 58.01.01.382.

### 4.1.5 Facility-wide Applicable Requirements

4.1.5.1 Fugitive Particulate Matter - IDAPA 58.01.01.650-651

4.1.5.1.1 Requirement

Facility-wide Condition 1.1 states that all reasonable precautions shall be taken to prevent particulate matter from becoming airborne in accordance with IDAPA 58.01.01.650-651.

4.1.5.1.2 Compliance Demonstration

Facility-wide Condition 1.2 states that the permittee is required to monitor and maintain records of the frequency and the methods used by the facility to reasonably control fugitive particulate emissions. IDAPA 58.01.01.651 gives some examples of ways to reasonably control fugitive emissions which include use of water or chemicals, applying dust suppressants, using control equipment, covering trucks, paving roads or parking areas, and removing materials from streets.

Facility-wide Condition 1.3 requires that the permittee maintain a record of all fugitive dust complaints received. In addition, the permittee is required to take appropriate corrective action as expeditiously as practicable after a valid complaint is received. The permittee is also required to maintain records that include the date that each complaint was received and a description of the complaint, the permittee's assessment of the validity of the complaint, any corrective action taken, and the date the corrective action was taken.

To ensure that the methods being used by the permittee to reasonably control fugitive particulate matter emissions whether or not a complaint is received, facility-wide condition 1.4 requires that the permittee conduct periodic inspections of the facility. The permittee is required to inspect potential sources of fugitive emissions during daylight hours and under normal operating conditions. If the permittee determines that the fugitive emissions are not being reasonably controlled the permittee shall take corrective action as expeditiously as practicable. The permittee is also required to maintain records of the results of each fugitive emission inspection.

Both Facility-wide Conditions 1.3 and 1.4 require the permittee to take corrective action as expeditiously as practicable. In general, the Department believes that taking corrective action within twenty-four (24) hours of receiving a valid complaint or determining that fugitive particulate emissions are not being reasonably controlled meets the intent of this requirement. However, it is understood that, depending on the circumstances, immediate action or a longer time period may be necessary.

4.1.5.2 Control of Odors - IDAPA 58.01.01.775-776

4.1.5.2.1 Requirement

Facility-wide Condition 1.5 and IDAPA 58.01.01.776 both state that: *"No person shall allow, suffer, cause or permit the emission of odorous gases, liquids or solids to the atmosphere in such quantities as to cause air pollution."* This condition is currently

considered federally enforceable until such time it is removed from the State Implementation Plan (SIP), at which time it will be a state-only enforceable requirement.

4.1.5.2.2 Compliance Demonstration

Facility-wide Condition 1.6 requires the permittee to maintain records of all odor complaints received. If the complaint has merit, the permittee is required to take appropriate corrective action as expeditiously as practicable. The records are required to contain the date that each complaint was received and a description of the complaint, the permittee's assessment of the validity of the complaint, any corrective action taken, and the date the corrective action was taken.

Facility-wide Condition 1.6 requires the permittee to take corrective action as expeditiously as practicable. In general, the Department believes that taking corrective action within twenty-four (24) hours of receiving a valid odor complaint meets the intent of this requirement. However, it is understood that, depending on the circumstances, immediate action or a longer time period may be necessary.

4.1.5.3 Visible Emissions - IDAPA 58.01.01.625

4.1.5.1.3.1 Requirement

IDAPA 58.01.01.625 and Facility-wide Condition 1.7 state that *"(No) person shall discharge any air pollutant to the atmosphere from any point of emission for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period which is greater than twenty percent (20%) opacity as determined . . ."* by IDAPA 58.01.01.625. This provision does not apply when the presence of uncombined water, NOx, and/or chlorine gas are the only reason(s) for the failure of the emission to comply with the requirements of this rule.

4.1.5.3.1 Compliance Demonstration

To ensure reasonable compliance with the visible emissions rule, Facility-wide Condition 1.8 requires that the permittee conduct routine visible emissions inspections of the facility. The permittee is required to inspect potential sources of visible emissions, during daylight hours and under normal operating conditions. If any visible emissions are present from any point of emission covered by this section, the permittee must take appropriate corrective action as expeditiously as practicable. If opacity is determined to be greater than twenty percent (20%) for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period, the permittee must take corrective action and report the exceedance in its annual compliance certification and in accordance with the excess emissions rules in IDAPA 58.01.01.130-136. The permittee is also required to maintain records of the results of each visible emissions inspection which must include the date of each inspection, a description of the permittee's assessment of the conditions existing at the time visible emissions are present, any corrective action taken in response to the visible emissions, and the date corrective action was taken.

It should be noted that if a specific emission unit has a specific compliance demonstration method for visible emissions that differs from facility-wide condition 1.8, then the specific compliance demonstration method overrides the requirement of Condition 1.8. Condition A.8 is intended for small sources that would generally not have any visible emissions.

Facility-wide Condition 1.8 requires the permittee to take corrective action as expeditiously as practicable. In general, DEQ believes that taking corrective action within twenty-four (24) hours of discovering visible emissions meets the intent of this requirement. However, it is understood that, depending on the circumstances, immediate action or a longer time period may be necessary.

4.1.5.4 Startup, Shutdown, Scheduled Maintenance, Safety Measures, Upset and Breakdown- IDAPA58.01.01.130-136

4.1.5.4.1 Requirement

Facility-wide Condition 1.9 requires that the permittee comply with the requirements of IDAPA 58.01.01.130-136 for startup, shutdown, scheduled maintenance, safety measures, upset, and breakdowns. This section is fairly self explanatory and no additional detail is necessary in this technical analysis. It should; however, be noted that subsections 133.02, 133.03, 134.04, and 134.05 are not specifically included in the permit as applicable requirements. These provisions of the *Rules* only apply if the permittee anticipates requesting consideration under subsection 131.02 of the *Rules* to allow DEQ to determine if an enforcement action to impose penalties is warranted. Section 131.01 states . . . *The owner or operator of a facility or emissions unit generating excess emissions shall comply with Sections 131, 132, 133.01, 134.01, 134.02, 134.03, 135, and 136, as applicable. If the owner or operator anticipates requesting consideration under Subsection 131.02, then the owner or operator shall also comply with the applicable provisions of Subsections 133.02, 133.03, 134.04, and 134.05.* Failure to prepare or file procedures pursuant to Sections 133.02 and 134.04 is not a violation of the *Rules* in and of itself, as stated in subsections 133.03.a and 134.06.b. Therefore, since the permittee has the option to follow the procedures in Subsections 133.02, 133.03, 134.04, and 134.05; and is not compelled to, the subsections are not considered applicable requirements for the purpose of this permit and are not included as such.

4.1.5.4.2 Compliance Demonstration

The compliance demonstration is contained within the text of Facility-wide Condition 1.9. No further clarification is necessary here.

**4.1.6 Emissions Description**

The permit is structured to include one individual emission unit with specific applicable requirements and three other operations within process-wide applicable requirements. The individual emission unit is a Zurn Industries hog fuel boiler.

Because process weight rate requirements (IDAPA 58.01.01.703) are applicable to an entire process, for the purpose of this permit it was determined that three (3) operations are affected by process weight. Since a process is a series of actions or operations leading to an end result, the production of dimensional lumber, it was determined that only one process exists. However, for each operation the applicable requirements in regards to PM are the process weight rules IDAPA 58.01.01.701-702. The operations are:

- Drying kilns
- Cyclones
- Wood by-product handling

Each operation consists of one or more emissions units that have been grouped together do to similar functions and have similar applicable requirements.

The emissions unit groups are listed in the permit as follows:

- Emissions Unit Group 1 - Zurn Industries Hog Fuel Boiler
  Includes:
  - Zurn Industries Hog Fuel Boiler
- Emissions Unit Group 2 - Drying Kilns
  Includes:
  - Drying Kiln#1 - P15
  - Drying Kiln#2 - P16
  - Drying Kiln#3 - P17
  - Drying Kiln#4 - P18
  - Drying Kiln#5 - P19

- Drying Kiln#6 - P20

- Emissions Unit Group 3 - Cyclones, Cyclone Baghouse, and Baghouse Includes:

  - Baghouse Cyclone - P6
  - Sawdust Cyclone - P7
  - Shavings Cyclone - P11
  - Shavings Cyclone - P12
  - Shavings Cyclone - P13
  - Shavings Cyclone - P14
  - Sawdust Cyclone - P21
  - Baghouse - P24

- Emissions Unit Group 4 - Wood By-product Handling

- Emissions Unit Group 5 - Emergency Generator

  Includes:

  - John Deere Emergency Generator, Model 6081AF001 1685F

- Emissions Unit Group 6 - Insignificant Activities

  - IDAPA 58.01.01.317.01.b - Insignificant activities on the basis of size or production rate.

A discussion of the individual emissions units and the operations, as well as the regulatory requirements and methods to determine compliance, are described in more detail below.

## 4.2 EMISSION UNITS

### 4.2.1 Zurn Industries Hog Fuel Boiler

4.2.1.1 Boiler Description

The drum water tube boiler, installed in 1978, is a hog fuel spreader stoker boiler designed by Zurn Industries (Erie City Type C - 3 drum boiler) and rated at sixty thousand pounds per hour (60,000 lb/hr) of saturated steam production with a design pressure of two hundred (200) psig. Most of the steam is used in the plant operations ninety-six percent (96%); only four percent (4%) is used for space heating. The boiler shall be fired on sawdust, bark, and wood shavings only. Fuel is transferred into the boiler by TR10 - the main fuel conveyor. The boiler operates continuously except for one week per year when it is shut down for maintenance. The boiler is equipped with four (4) manually operated soot blowers.

The stack parameters for the boiler are as follows:

| | |
|---|---|
| Stack Height | 50 feet (minimum) |
| Stack Diameter | 3.6 feet (maximum) |
| Stack Flow Rate | 11,393 actual cubic feet per minute (ACFM) (minimum) |
| Stack Temperature | 250 F (minimum) |

The Zurn Industries boiler was source tested on April 1 and 2 , 1978 for particulate emissions. The emission rate was determined to be three and nine-tenths (3.9) pounds per hour average at thirty-two thousand (32,000) pound per hour average steam production. This emission rate determined the boiler to be in compliance with the *Rules*.

Emissions from the boiler are controlled by a multiclone and a wet scrubber and then vented through a boiler stack. The multiclone is manufactured by Zurn Industries (FTSA90YTXD) and the wet scrubber is manufactured by Perry Smith with a flow rate of four hundred fifty (450) gallons per minute (gpm). Emissions from the boiler fuel storage bin are reduced because it is enclosed on three (3) sides.

4.2.1.2 Permit Requirement - Fuel Burning Equipment - (IDAPA 58.01.01.675)

4.2.1.2.1 Applicability - Standards for Minor and Existing Sources

IDAPA 58.01.01.677 states that a person shall not discharge into the atmosphere from any fuel burning equipment in operation prior to October 1, 1979, or with a maximum rated input of less than ten (10) million BTU per hour, PM in excess of the concentrations shown in the following table:

| Fuel Type | Allowable Particulate Emissions | Percent Oxygen |
|---|---|---|
| Wood | 0.200 gr/scf | 8% |

The effluent gas volume shall be corrected to the oxygen concentration shown.

This boiler was in operation in 1978 and; therefore, is subject to the requirements of IDAPA 58.01.01.677. (Permit Condition 2.1)

4.2.1.2.2 Compliance Demonstration Method

The permittee shall conduct a particulate matter performance test at maximum operating capacity in accordance with the procedures outlined in 40 CFR 60, Appendix A, Method 5; or a DEQ alternative method, as provided in Section 1.15 of this permit, while combusting hog fuel. The test shall be performed during the first three (3) months of the permit term to demonstrate compliance with the grain loading standard in Section 2.1 of this permit, and with IDAPA 58.01.01.677. (Permit Condition 2.4)

The permittee shall monitor and record the steam production rate of the boiler during each test. The permittee shall monitor and record the amount of hog fuel combusted in the boiler only during each test. A visible emissions evaluation shall be performed during each performance test. The visible emissions evaluation shall be conducted in accordance with the procedures contained in IDAPA 58.01.01.625.

If the particulate grain loading measured in the initial performance test is less than or equal to seventy-five percent (75%) of the emission standard in IDAPA 58.01.01.677, no further testing shall be required during the life of the permit. If the particulate grain loading measured during the performance test is greater than seventy-five percent (75%), but less than or equal to ninety percent (90%) of the emission standard in IDAPA 58.01.01.677, a second test shall be required in the third year of the permit term. If the particulate grain loading measured during the performance test is greater than ninety percent (90%) of the emission standard in IDAPA 58.01.01.677, the permittee shall conduct a performance test annually.

Operational parameters for the Zurn Industries hog fuel boiler multiclone and wet scrubber shall be taken from pressure drop readings and flow meter readings of the most recent performance test that demonstrates compliance with the PM emission limit of Section 2.1 of the permit. Operational parameters may be altered according to the pressure drop readings and flow meter readings gained during subsequent performance tests.

The permittee will demonstrate compliance with the wood combustion grain loading standard specified by IDAPA 58.01.01.677 in the following ways:

The permittee shall perform one or more source test(s). During the test(s) the steaming rate and the weight of fuel combusted will be recorded. The recording of the weight of the fuel combusted will be required only during a source test.

The permittee shall maintain the operation of the multiclone and the wet scrubber control devices according to the methods described by the multiclone and wet scrubber O&M Manual. The permittee shall record the multiclone's pressure drop and wet scrubber's flow rates and pressure drop during any source test.

The permittee shall maintain an operational steaming rate (steaming rate is calculated by summing all of the hourly readings obtained and divided by the total number of hourly readings) at or below one hundred twenty percent (120%) of the average steaming rate attained during the most recent performance test conducted pursuant to the permit which demonstrated compliance with Section 2.1 of the permit. If a maximum operational steaming rate of one hundred twenty percent (120%) of the average steaming rate attained during the most recent performance test would exceed the emission limit in Section 2.1, the maximum operational steaming rate shall be limited to the steaming rate obtained by the following equation:

$$\text{Max. } steam\ rate = Ave.\ steam\ rate\ during\ test\ x\ \left(\frac{0.20\ gr/dscf\ @\ 8\%\ Oxygen}{tested\ grain\ loading\ @\ 8\%\ Oxygen}\right)$$

The permittee may conduct additional performance tests during the permit term to revise the allowable steaming rate so long as the performance tests conform to all requirements of this permit. Whenever the steaming rate exceeds the allowable steaming rate, the permittee shall take corrective action within a reasonable time to bring the steaming rate to the allowable rate or below. Deviations from this allowable operating rate shall not be a violation of this permit, unless the permittee fails to take corrective action or an emission standard prescribed in this permit is exceeded. The Department may consider the frequency, duration, or magnitude of the deviations to determine if additional action is required. (Permit Condition 2.3)

The operational steaming rate limit will be used to establish whether the permittee has demonstrated continuous compliance with the wood combustion grain loading standard. The permittee has the option to re-test at any time during the permit term in order to revise the allowable steaming rate.

4.2.1.2.3 Monitoring

The permittee is required to continuously monitor the steaming rate of the Zurn Industries Boiler, the multiclone's pressure drop and the wet scrubber's flow rate and pressure drop. If the continuous steaming rate measurement system becomes inoperable, a backup monitoring method consisting of manual hourly readings shall be implemented within one (1) hour of the continuous steaming rate measurement system becoming inoperable. During the following periods, however, the backup shall be implemented within twenty-four (24) hours: the week between Christmas and New Year's, Memorial Day, and Labor Day. The backup system shall be used until the original system is operational. (Permit Condition 2.10)

The permittee is required to maintain the steaming rate within the allowable steaming rate range established during the most recent compliance test. However, if monitoring indicates that the steaming rate is outside of the specified range, the permittee is required to take corrective action within a reasonable time to correct the cause of the excursion. This does not; however, preclude DEQ from requiring Bennett to demonstrate that the grain loading standard was not exceeded during the excursion if DEQ determines that magnitude, duration, or frequency of the excursion warrants such a demonstration.

4.2.1.2.4 Testing

Zurn Industries Hog Fuel Boiler:

The permittee is required to perform a compliance test according to the requirements of EPA Reference Method 5, as defined by 40 CFR 60, Appendix A. An initial compliance test is required to be conducted during the first three months (3) of the permits term. The results of the test determine whether subsequent testing is required. A performance test protocol may, at the permittee's discretion, be submitted to DEQ for approval. Any testing subsequent to the initial compliance test must conform to the method and requirements listed in the approved protocol. The permittee has the option of submitting an alternate test protocol for subsequent test(s), but approval of the protocol(s) is not guaranteed.

The average steam production rate recorded during the compliance test(s) establishes the operational limit for the boiler (see Section 5.1.2(b)(3)). The permittee has the option to retest at a later date to increase the allowable steam production rate provided the approved protocol is adhered to or an alternative source test protocol is approved by DEQ. The pressure drop across the multiclone shall be maintained at a level between twenty percent (20%) above or twenty percent (20%) below the average pressure drop recorded during the most recent performance test conducted pursuant to the permit which demonstrates compliance with Section 2.1 of the permit. The permittee may conduct additional performance tests during the permit term to revise the allowable pressure drop so long as the performance tests conform to all the requirements of the permit. Whenever the pressure drop across the multiclone is outside the allowable range, the permittee shall take corrective action within a reasonable time to bring the pressure drop back within the allowable range. Deviations from this allowable operating range shall not be a violation of the permit, unless the permittee fails to take corrective action or an emission standard prescribed in the permit is exceeded. DEQ may consider the frequency, duration, or magnitude of the deviations to determine if additional action is required.

The pressure drop and flow rate across the wet scrubber shall be maintained at a level between twenty percent (20%) above or twenty percent (20%) below the average pressure drop and flow rate recorded during the most recent performance test conducted pursuant to the permit which demonstrates compliance with Section 21 of the permit. The permittee may conduct additional performance tests during the permit term to revise the allowable pressure drop or flow rate so long as the performance tests conform to all the requirements of the permit. Whenever the pressure drop or flow rate across the venturi scrubber is outside the allowable range, the permittee shall take corrective action within a reasonable time to bring the pressure drop or flow rate back within the allowable range. Deviations from this allowable operating range shall not be a violation of this permit, unless the permittee fails to take corrective action or an emission standard prescribed in the permit is exceeded. DEQ may consider the frequency, duration, or magnitude of the deviations to determine if additional action is required.

4.2.1.2.5 Recordkeeping

The permittee shall keep records of all compliance test results performed on the Zurn Industries boiler including the steaming rate measurements obtained and the amount of hog fuel combusted during the test(s).

The permittee is required to maintain records of each weekly visible emissions evaluation performed on the Zurn Industries boiler.

The permittee is required to maintain records of the daily readings for the multiclone's differential pressure and the wet scrubber's differential pressure and flow rate.

Standard requirements for recordkeeping of monitoring information must be maintained in accordance with Facility-wide Condition 1.11 of the permit.

4.2.1.2.6 Reporting

The permittee must submit certified semi-annual reports of all required monitoring listed above. Deviations are to be noted by the permittee and the corrective action(s) taken must be included in the semi-annual report.

4.2.1.3 Permit Requirement - Visible Emissions - (IDAPA 58.01.01.625)

4.2.1.3.1 Applicability

The visible emissions limitations in IDAPA 58.01.01.625 state that a person shall not discharge any air pollutant into the atmosphere from any point of emission for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period which is greater than twenty percent (20%) opacity as determined by procedures contained in IDAPA 58.01.01.625. ( Permit Condition 2.2)

4.2.1.3.2 Compliance Demonstration Method

To demonstrate compliance with the visible emissions requirements of IDAPA 58.01.01.625, a certified observer will conduct weekly visible emissions evaluations on the boiler stack. The observer will perform the visible emissions evaluation in accordance with the procedures outlined in IDAPA 58.01.01.625.

4.2.1.3.3 Monitoring

The permittee will monitor, on a weekly basis, emissions from the Zurn Industries boiler by performing a visible emissions evaluation on the boiler stack in accordance with the procedures outlined in IDAPA 58.01.01.625.

A visible emissions evaluation performed during a performance test specified by Permit Condition 2.4 will qualify as a visible emission evaluation for that week provided it is performed in IDAPA 58.01.01.625.

4.2.1.3.4 Testing

There is no testing required to satisfy the visible emissions requirement.

4.2.1.3.5 Recordkeeping

The permittee is required to maintain records of each weekly visible emissions evaluation performed on the Zurn Industries boiler.

Standard requirements for recordkeeping of monitoring information must include the items listed below.

Date of observation,
Time of observation,
Equipment/emission point observed,
Weather conditions during observation, and
Presence of any visible emission - yes or no.

4.2.1.3.6 Reporting

The permittee must submit certified semi-annual reports of all required monitoring listed above. Deviations are to be noted by the permittee and the corrective action(s) taken must be included in the semi-annual report.

**4.2.2 Drying Kilns**

The following table lists the emission units for Emissions Unit Group 2 (drying kilns)

| Emissions Point Identification | Emissions Unit(s) Process(es) | Emissions Control Device |
|---|---|---|
| P15 | Drying Kiln | None |
| P16 | Drying Kiln | None |
| P17 | Drying Kiln | None |
| P18 | Drying Kiln | None |
| P19 | Drying Kiln | None |
| P20 | Drying Kiln | None |

4.2.2.1 Emissions Unit Description

The drying kilns use steam from the boiler to dry the lumber. All the drying kilns have several vents on the roof. These vents have lids that are mechanically controlled by humidity monitors. When the temperature/humidity is too high, the lids will open and allow the emissions to escape to the atmosphere. There are no control devices on the exhausts from the kilns. The exhaust streams from the roof vents of the drying kilns at a height of twenty-three (23) feet, and the temperature of the exhaust streams is 160°F. The maximum in-kiln temperature is 240°F.

There are six drying kilns on-site. Moore manufactured kilns P15 and 16. LSI manufactured kilns P17, P18, and P19. Wellons, Inc manufactured kiln P20.

The vent parameters for the six (6) drying kilns are as follows:

| Emission Point | KILN | Vents | Total Vent Area, square feet |
|---|---|---|---|
| P15 | #1 | 14 | 42 |
| P16 | #2 | 18 | 55 |
| P17 | #3 | 10 | 31 |
| P18 | #4 | 16 | 49 |
| P19 | #5 | 16 | 49 |
| P20 | #6 | 12 | 65 |

The drying kilns are used to dry the green lumber at the annual rate presented below:

P1573 feet double track 18.6 MM board feet
P1673 feet double track 18.6 MM board feet
P1773 feet single track 9.3 MM board feet
P1873 feet double track 18.6 MM board feet
P1973 feet double track 18.6 MM board feet
P2073 feet double track 18.6 MM board feet

TOTAL 102.3 MM board feet

4.2.2.2 Permit Requirement - Process Weight - (IDAPA 58.01.0.701,702)

4.2.2.2.1 Applicability

IDAPA 58.01.01.702 states that a person shall not discharge into the atmosphere from any source operating prior to October 1, 1979, PM in excess of the amount shown by the following equations, where E is the allowable emission from the entire source in pounds per hour, and PW is the process weight in pounds per hour:

a. If PW is less than 17,000 pounds per hour,

$$E = 0.045(PW)^{0.6}$$

b. If PW is equal to or greater than 17,000 pounds per hour,

$$E = 1.12(PW)^{0.27}$$

This PM emission limitation applies to four (4) emission units of the Emissions Unit Group 2 (drying kilns P15, P16, P18, and P19).

IDAPA 58.01.01.701 states that a person shall not discharge into the atmosphere from any source operating on or after October 1, 1979, PM in excess of the amount shown by

the following equations, where E is the allowable emission from the entire source in pounds per hour, and PW is the process weight in pounds per hour:

a. If PW is less than 9,250 pounds per hour,

$$E = 0.045(PW)^{0.6}$$

b. If PW is equal to or greater than 9,250 pounds per hour,

$$E = 1.10(PW)^{0.25}$$

This PM emission limitation applies to two (2) of the emission units in Emissions Unit Group 2 (drying kilns P17 and P20).

A process weight rate PM emission limitation is a "moving scale" requirement. The affected emission units must comply with an allowable PM emission limit that corresponds to the weight (including the water content) of the material being processed by the group of affected equipment.

4.2.2.2.2 Compliance Demonstration Method

If monitoring, testing, recordkeeping, or reporting requirements are not specified in State of (sic) Federal rules, then the appropriate compliance demonstration method should be a function of the magnitude and impact of emissions, the emissions unit design, the control equipment used, the ratio of actual emissions to the emissions limit, and the emissions history. (It is understood that the permittee and DEQ will reach agreement on the appropriate level of compliance demonstration necessary for each unit).

EPA's guidance on periodic monitoring states that "*...if some level of control is necessary to comply with the standard, then the permit must either specify frequent measurement of particulate matter and/or collection of control equipment parameters to assure proper operation and maintenance of the control device.*" The EPA criteria are considered for the development of adequate monitoring and recordkeeping requirements for the facility's compliance certification.

The permittee shall conduct weekly observances of visible emissions from the drying kilns for maintenance during daylight hours under normal operating conditions as an indicator of proper operation. If visible emissions from the drying kilns are present, the permittee shall take corrective action in accordance with the drying kiln O&M Manual. The drying kiln O&M Manual shall be submitted to DEQ for approval within sixty (60) days of issuance of this permit and shall include, at a minimum, a general description of the equipment; normal operating conditions and procedures; startup, shutdown, and maintenance procedures; and upset conditions guidelines; and the corrective action procedures.

The permittee shall maintain records of the monthly lumber throughput (in board feet) of all the drying kiln operations that are affected by the process weight rule. These records shall be maintained in accordance with Section 1.11 of the permit.

The permittee proposes that continuous compliance may be established by following procedures established by the drying kiln's O&M Manual, which the permittee shall develop following issuance of the Tier I OP. In other words, if the drying kilns are properly operated, the process weight rate emission limitation will not be exceeded.

4.2.2.2.3 Monitoring

An observer shall conduct an inspection of each drying kiln for emissions at least weekly. In the event any level of visible emissions are present, the permittee shall perform maintenance on the drying kilns to the extent necessary to address the problem.

4.2.2.2.4 Testing

There is no testing required to satisfy the PM requirement.

4.2.2.2.5 Recordkeeping

The results of each observation shall be recorded and maintained as required in Section 1.11 of the permit, and shall include, but not limited to, the following information:

Date of observation,
Time of observation,
Equipment/emission point observed,
Weather conditions during observation, and
Presence of any visible emission - yes or no.

The permittee shall record in boardfeet the throughput of lumber that is processed within the drying kilns both monthly and in the most recent consecutive twelve (12) month period. The permittee shall calculate the process weight rate limitations using the appropriate formula from sections 5.1 and 5.2 on each piece of the process equipment affected by the process weight rule. These records shall be maintained in accordance with Section 1.11 of the permit.

4.2.2.2.6 Reporting

the permittee must submit certified semi-annual reports of all required monitoring listed above. Deviations are to be noted by the permittee and the corrective action(s) taken must be included in the semi-annual report. A certification of the compliance status must be submitted annually.

4.2.2.3 Permit Requirement - Visible Emissions - (IDAPA 58.01.01.625)

4.2.2.3.1 Applicability

The visible emissions limitations in IDAPA 58.01.01.625 state that a person shall not discharge any air pollutant into the atmosphere from any point of emission for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period which is greater than twenty percent (20%) opacity as determined by procedures contained in IDAPA 58.01.01.625.

4.2.2.3.2 Compliance Demonstration Method

If monitoring, testing, recordkeeping, or reporting requirements are not specified in State of (sic) Federal rules, then the appropriate compliance demonstration method should be a function of the magnitude and impact of emissions, the emissions unit design, the control equipment used, the ratio of actual emissions to the emissions limit, and the emissions history. (It is understood that the permittee and DEQ will reach agreement on the appropriate level of compliance demonstration necessary for each unit).

An observer shall conduct an inspection of emissions from each drying kiln vent at least weekly. In the event any level of visible emissions are present, the permittee shall perform a visible emissions evaluation in accordance with the procedures outlined in IDAPA 58.01.01.625.

The permittee shall take corrective action in accordance with the drying kiln O&M Manual. The drying kiln O&M Manual shall be submitted to DEQ for approval within sixty (60) days of issuance of this permit and shall include, at a minimum, a general description of the equipment; normal operating conditions and procedures; startup,

shutdown, and maintenance procedures; and upset conditions guidelines; and the corrective action procedures.

4.2.2.3.3 Monitoring

An observer shall perform an observation of each drying kiln's vent emissions at least weekly to determine whether any visible emissions are present. These observations are to be performed weekly unless the permittee has qualified for monthly or quarterly observations as allowed in the permit.

A certified observer shall also perform quarterly evaluations of visible emissions from each drying kiln vent, in accordance with the procedures outlined in IDAPA 58.01.01.625.

4.2.2.3.4 Testing

There are no testing requirements associated with establishing compliance with IDAPA 58.01.01.625.

4.2.2.3.5 Recordkeeping

The permittee will record the results of the observer's inspection of drying kiln vent emissions and provide documentation in records according to the content and format listed below:

Date of observation,
Time of observation,
Equipment/emission point observed, and
Presence of any visible emission - yes or no.

The permittee must record the results of each weekly and quarterly visible emissions evaluation performed on each drying kiln vent emissions according to the standard requirements for recordkeeping of monitoring information. The record must be maintained in accordance with 1.11 of the permit.

4.2.2.3.6 Reporting

The permittee must submit certified semi-annual reports of all required monitoring listed above. Deviations are to be noted by the permittee and the corrective action(s) taken must be included in the semi-annual report.

## 4.2.3 Cyclones, Cyclone Baghouse, and Baghouse

4.2.3.1 Cyclones and Cyclone Baghouse Description

Shavings are handled through two (2) cyclones (P13 and P14). These two cyclones can handle a maximum capacity of twenty thousand (20,000) green tons annually.

The stack parameters for the shavings handling cyclones (P13 and P14) are as follows:

| | P13 | P14 |
|---|---|---|
| Stack Height (minimum) feet | 52 | 60 |
| Stack Diameter (maximum) feet | 2.5 | 3.3 |
| Stack Flow Rate (minimum) ACFM | 43,000 | 43,000 |
| Stack Temperature (minimum) ° F | ambient from all stacks | |

The heavy sawdust is handled at the hourly rate of two (2) green tons and an annual rate of twenty thousand (20,000) green tons. The emissions are controlled by a cyclone (P21). The lighter sawdust is handled by the P24 baghouse at an annual rate of one hundred twenty-five (125) green tons.

The stack parameters for the sawdust cyclones (P21 and P7) and shaving cyclones (P11 and P12) as provided in the application are as follows:

| | P7 | P11 | P12 | P21 |
|---|---|---|---|---|
| Stack Height (minimum) feet | 59 | 60 | 75 | 53 |
| Stack Diameter (maximum) feet | 2.9 | 3 | 7 | 2.5 |
| Stack Flow Rate (minimum) ACFM | 2,000 | 34,600 | 43,000 | 2000 |
| Stack Temperature (minimum) °F | ambient from all stacks | | | |

The stack parameters for the baghouse cyclone (P6) and the Baghouse (P24) as provided in the application are as follows:

| | P6 | P24 |
|---|---|---|
| Stack Height (minimum) feet | 56 | 22 |
| Stack Diameter (maximum) feet | 1.5 | NA |
| Stack Flow Rate (minimum) ACFM | 1393 | 56307 |
| Stack Temperature (minimum) °F | ambient from all stacks | |

The calculated emissions for the cyclones can be found within the spreadsheet found in Appendix A. For the cyclones identified as P7 and P24, the grain standard as determined by the process-weight rule has an emission value far greater than the 0.03 grains per standard cubic foot (gr/scf) stated within EPA's Compilation of Air Pollutant Emission Factors (AP-42). However the calculation using the DEQ-accepted emission factor indicates that the emission grain loading for these two sources is within the 0.001 to 0.16 gr/scf range stated within AP-42. This is just one instance in which the process weight rule as stated within the state *Rules* can provide emission values that are far too large both for an applicable standard and for the actual emission that enters the environment.

4.2.3.2 Permit Requirement - Process Weight - (IDAPA 58.01.01.703)

4.2.3.2.1 Applicability

IDAPA 58.01.01.703 states that a person shall not discharge into the atmosphere from any source operating prior to October 1, 1979, PM in excess of the amount shown by the following equations, where E is the allowable emission from the entire source in pounds per hour, and PW is the process weight in pounds per hour:

a. If PW is less than 17,000 pounds per hour,

$$E = 0.045(PW)^{0.6}$$

b. If PW is equal to or greater than 17,000 pounds per hour,

$$E = 1.12(PW)^{0.27}$$

This PM emission limitation applies to the five (5) emission units of the Emission Unit Group 3 (cyclones P7, P11, P12, P13, and P14).

IDAPA 58.01.01.701 states that a person shall not discharge into the atmosphere from any source operating on or after October 1, 1979, PM in excess of the amount shown by the following equations, where E is the allowable emission from the entire source in pounds per hour, and PW is the process weight in pounds per hour:

a. If PW is less than 9,250 pounds per hour,

$$E = 0.045(PW)^{0.6}$$

b. If PW is equal to or greater than 9,250 pounds per hour,

$$E = 1.10(PW)^{0.25}$$

This PM emission limitation applies to two (2) emission units of the Emission Unit Group #3 (cyclone P24 and cyclone/baghouse P6).

A process weight rate PM emission limitation is a moving scale requirement. The affected emission units must comply with an allowable PM emission limit that corresponds to the weight (including the water content) of the material being processed by the group of affected equipment.

4.2.3.2.2 Compliance Demonstration Method

If monitoring, testing, recordkeeping, or reporting requirements are not specified in State of (sic) Federal rules, then the appropriate compliance demonstration method should be a function of the magnitude and impact of emissions, the emissions unit design, the control equipment used, the ratio of actual emissions to the emissions limit, and the emissions history. (It is understood that the permittee and DEQ will reach agreement on the appropriate level of compliance demonstration necessary for each unit).

EPA's guidance on periodic monitoring states that *...if some level of control is necessary to comply with the standard, then the permit must either specify frequent measurement of particulate matter and/or collection of control equipment parameters to assure proper operation and maintenance of the control device.* EPA criteria are considered for the development of adequate monitoring and recordkeeping requirements for the facility's compliance certification.

The permittee shall conduct weekly observances of visible emissions from the cyclones and cyclone baghouse for maintenance during daylight hours under normal operating conditions as an indicator of proper operation. If visible emissions from the cyclones and cyclone baghouse are present, the permittee shall take corrective action in accordance with the cyclone and cyclone baghouse O&M Manual. The cyclone and cyclone baghouse O&M Manual shall be submitted to DEQ for approval within sixty (60) days of issuance of this permit and shall include, at a minimum, a general description of the equipment; normal operating conditions and procedures; startup, shutdown, and maintenance procedures; and upset conditions guidelines; and the corrective action procedures.

The permittee proposes that continuous compliance may be established by following procedures established by the cyclones and cyclone baghouse O&M Manual, which the permittee shall develop following issuance of the Tier I OP.

The permittee shall demonstrate compliance with the grain loading emission rate stated in AP-42 by the following:

- Determine the pounds per hour (#/hr) particulate emissions by use of the appropriate process-weight formula given above. This will determine allowable emissions, but not actual emissions.
- Divide the pounds per hour (#/hr) emissions rate by the actual flow rate of the air (ACFM) through the cyclone.
- Divide by sixty (60) minutes per hour (min/hr) and multiply by 7000 grains per pound (gr/#); this will provide the grains per actual cubic of air flow. If it is assumed that actual cubic feet (ACF) of air flow is approximately equal to standard dry cubic feet (SDSF) of air flow; this will provide a figure of grains per dry standard cubic foot (gr/sdcf). If the process is low in moisture the difference in ACF and SDCF is small, as in wood by-products after kiln drying.

These calculations are demonstrated within the spreadsheet in Appendix A. The calculations were based on the submitted data from the permittee.

4.2.3.2.3 Monitoring

An uncertified observer shall conduct an inspection of each cyclone and cyclone baghouse at least weekly. In the event any level of visible emissions are present, the permittee shall perform maintenance on the cyclone and/or the related process equipment to the extent necessary to address the problem.

Based on the applicant's submittal, the average emissions pounds per hour (#/hr) are about twenty percent (20%) of the allowable emissions determined by the process weight rate. The calculations can be found in Appendix A of the technical memorandum. Since these calculated emissions are such a small percentage of the standard, the possibility of any exceedance is very small. Therefore, the monitoring of the throughput and the hours of operation is not required.

4.2.3.2.4 Testing

There is no testing required to satisfy the PM requirement.

4.2.3.2.5 Recordkeeping

Based on the applicant's submittal, the average emissions pounds per hour (#/hr) are about twenty percent (20%) of the allowable emissions determined by the process weight rate. The calculations can be found in Appendix A of this technical memorandum. Since these calculated emissions are such a small percentage of the standard, the possibility of any exceedance is very small. Therefore, the monitoring of the throughput and the hours of operation is not required.

The results of each observation shall be recorded and maintained as required in Section 1.11 of the permit, and shall include, but not limited to, the following information:

Date of observation,
Time of observation,
Equipment/emission point observed,
Weather conditions during observation, and
Presence of any visible emission - yes or no.

4.2.3.2.6 Reporting

The permittee must submit certified semi-annual reports of all required monitoring listed above. Deviations are to be noted by the permittee and the corrective action(s) taken must be included in the semi-annual report. A certification of the compliance status must be submitted annually.

4.2.3.3 Permit Requirement - Visible Emissions - (IDAPA 58.01.01.625)

4.2.3.3.1 Applicability

The visible emissions limitations in IDAPA 58.01.01.625 state that a person shall not discharge any air pollutant into the atmosphere from any point of emission for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period which is greater than twenty percent (20%) opacity as determined by procedures contained in IDAPA 58.01.01.625.

4.2.3.3.2 Compliance Demonstration Method

If monitoring, testing, recordkeeping, or reporting requirements are not specified in State of (sic) Federal rules, then the appropriate compliance demonstration method should be a function of the magnitude and impact of emissions, the emissions unit design, the control equipment used, the ratio of actual emissions to the emissions limit, and the

emissions history. (It is understood that the permittee and DEQ will reach agreement on the appropriate level of compliance demonstration necessary for each unit).

An observer shall conduct an inspection of the cyclones and cyclone baghouse at least weekly. In the event any level of visible emissions are present, the permittee shall perform repair or maintenance on the cyclones and cyclone baghouse to the extent necessary to address the problem.

A visible emissions evaluation in accordance with the procedures outlined in IDAPA 58.01.01.625 shall be conducted on the cyclones and cyclone baghouse stack on a quarterly basis.

4.2.3.3.3 Monitoring

An observer shall perform an observation on the emissions point of the cyclones and cyclone baghouse at least weekly to determine whether any visible emissions are present. These observations are to be performed weekly unless permittee has qualified for monthly or quarterly observations as allowed in the permit.

A certified observer shall also perform quarterly evaluations of visible emissions from the cyclones and cyclone baghouse emissions points, in accordance with the procedures outlined in IDAPA 58.01.01.625.

4.2.3.3.4 Testing

There are no testing requirements associated with establishing compliance with IDAPA 58.01.01.625.

4.2.3.3.5 Recordkeeping

The permittee will record the results of the observer's inspection of the cyclones and cyclone baghouse and provide documentation in records according to the content and format listed below.

Date of observation,
Time of observation,
Equipment/emission point observed, and
Presence of any visible emission - yes or no.

The permittee must record the results of each visible emissions evaluation performed on the cyclones and cyclone baghouse emissions stack according to the standard requirements for recordkeeping of monitoring information. The record must be maintained in accordance with 1.11 of the permit.

4.2.3.3.6 Reporting

The permittee must submit certified semi-annual reports of all required monitoring listed above. Deviations are to be noted by the permittee and the corrective action(s) taken must be included in the semi-annual report.

### 4.2.4 Wood By-product Handling

4.2.4.1 Wood By-product Handling Description

The sources in Emission Unit Group 4 can contribute to particulate emissions from the handling of wood and wood by-products or through general plant activities. These emissions units do not vent through a stack or have any pollution control equipment attached.

| Emission Point Identification | Emissions Unit(s)/ Process(es) | Emission Control Device |
|---|---|---|
| TR13 | Bark Bin to Truck | None |
| TR14 | Sawdust Bin to Truck | None |
| TR15 | Chip Bins to Truck | None |
| TR16 | Shavings to Truck | None |

The facility stated within their application that these emission-producing operations have no emissions control devices. However, these emissions units are located next to a tall building and have a wall along the outside edge of the bins, thus making a two-sided enclosure. The control of the described enclosure does not sufficiently reduce the possibility of having an airborne emission of $PM_{10}$ greater than ten (10) percent of significant as defined in IDAPA 58.01.01.006.92, thus not qualifying these emission units as insignificant activities. The process weight rate for these units will be established from IDAPA 58.01.01.006.81.b:

*For cyclical or batch source operations, the total process weight for a period that covers a complete cycle of operation or an integral number of cycles, divided by the hours of actual process operation during a period. Where the nature of any process or operation or the design of any equipment is such as to permit more than one (1) interpretation of this definition, the interpretation that results in the minimum value for allowable emissions shall apply.*

The application from Bennett indicates that the normal unloading rate of the bins is 25 BDT per hour, with the exception of the chip bin that can unload at a rate of 50 BDT per hour. Assuming that the majority of material would be at fifteen (15) percent moisture content, the process weight would be approximately thirty 30 actual tons per hour and sixty (60) actual tons per hour for the chip bin).

During unloading activities these emissions units would be subject to the applicable requirements of PM, process weight limitations, IDAPA 58.01.01.701-702, and the applicable requirement of visible emissions, IDAPA 58.01.01.625.

DEQ's inspection report of these emission units in 1998 recorded that while observing two bins unloading no visible emissions could be seen for one bin and only slight visible emissions could be seen for the other bin. This would indicate that the airborne particulate would be of a small quantity producing little to no visible emissions. Thus the use of process weight to determine the allowable emissions will overstate the unit's emissions of this type, regardless of its applicability to the rule.

4.2.4.2 Permit Requirement - Process Weight - (IDAPA 58.01.01.703)

4.2.4.2.1 Applicability

IDAPA 58.01.01.703 states that a person shall not discharge into the atmosphere from any source operating prior to October 1, 1979, PM in excess of the amount shown by the following equations, where E is the allowable emission from the entire source in pounds per hour, and PW is the process weight in pounds per hour:

a. If PW is less than 17,000 pounds per hour,

$$E = 0.045(PW)^{0.6}$$

b. If PW is equal to or greater than 17,000 pounds per hour,

$$E = 1.12(PW)^{0.27}$$

This PM emissions limitation applies to the three (3) emissions units of the Emission Unit Group 4 (Wood By-product Handling; TR14, TR15, & TR16).

IDAPA 58.01.01.701 states that a person shall not discharge into the atmosphere from any source operating on or after October 1, 1979, PM in excess of the amount shown by the following equations, where E is the allowable emission from the entire source in pounds per hour, and PW is the process weight in pounds per hour:

a. If PW is less than 9,250 pounds per hour,

$$E = 0.045(PW)^{0.6}$$

b. If PW is equal to or greater than 9,250 pounds per hour,

$$E = 1.10(PW)^{0.25}$$

This PM emissions limitation applies to the one (1) emissions unit of the Emission Unit Group 4 (Wood By-product Handling; TR13). (Permit Condition 5.1, and 5.2)

A process-weight rate PM emission limitation is a "moving scale" requirement. The affected emissions units must comply with an allowable PM emissions limit that corresponds to the weight (including the water content) of the material being processed by the group of affected equipment.

4.2.4.2.2 Compliance Demonstration Method

If monitoring, testing, recordkeeping, or reporting requirements are not specified in State of (sic) Federal rules, then the appropriate compliance demonstration method should be a function of the magnitude and impact of emissions, the emissions unit design, the control equipment used, the ratio of actual emissions to the emissions limit, and the emissions history. (It is understood that the permittee and DEQ will reach agreement on the appropriate level of compliance demonstration necessary for each unit).

EPA's guidance on periodic monitoring states that *"...if some level of control is necessary to comply with the standard, then the permit must either specify frequent measurement of particulate matter and/or collection of control equipment parameters to assure proper*

*operation and maintenance of the control device."* EPA criteria are considered for the development of adequate monitoring and recordkeeping requirements for the facility's compliance certification.

The permittee shall conduct weekly observances of visible emissions from the bins during daylight hours under normal operating conditions (while unloading) to determine proper operation. If visible emissions from the bins are present, the permittee shall take corrective action in accordance with the bins O&M Manual. The bins O&M Manual shall be submitted to DEQ for approval within sixty (60) days of issuance of this permit and shall include, at a minimum, a general description of the bins, normal operating conditions and procedures; startup, shutdown, and maintenance procedures; and upset conditions guidelines, and the corrective action procedures. (Permit Condition 5.4)

The permittee shall maintain records of the monthly throughputs of all the process equipment affected by the process weight rule and the hours of operation for each month. The permittee shall calculate the process weight rate limitations using the appropriate formula from sections 51 and 5.2 on each of the process equipment affected by the process weight rule. These records shall be maintained in accordance with Section 1.11 of the permit. (Permit Condition 5.7)

The permittee proposes that continuous compliance may be established by following procedures established by the bin O&M Manual, which the permittee shall develop following issuance of the Tier I OP. (Permit Condition 5.4)

4.2.4.2.3 Monitoring

An observer shall conduct an inspection of each bin emissions point at least weekly. In the event any level of visible emissions are present, the permittee shall perform repair or maintenance on the bins and/or the related process equipment to the extent necessary to address the problem. (Permit Condition 5.4)

4.2.4.2.4 Testing

There are no testing requirements for the permittee to perform for determining compliance with the particulate matter limitation.

4.2.4.2.5 Recordkeeping

The results of each observation shall be recorded and maintained as required in Section 1.11 of this permit, and shall include, but not limited to, the following information:

Date of observation,
Time of observation,
Equipment/emission point observed,
Weather conditions during observation, and
Presence of any visible emission - yes or no.

The permittee must record the results of each weekly bin emissions evaluation performed on each bin's unloading operation according to the standard requirements for recordkeeping of monitoring information. The record must maintained in accordance with 1.11 of the permit. (Permit Condition 5.4)

4.2.4.2.6 Reporting

The permittee must submit certified semi-annual reports of all required monitoring listed above. Deviations are to be noted by the permittee and the corrective action(s) taken must be included in the semi-annual report. A certification of the compliance status must be submitted annually.

4.2.4.3 Permit Requirement - Visible Emissions - (IDAPA 58.01.01.625)

4.2.4.3.1 Applicability

Unless specified elsewhere in this permit, the permittee shall conduct a monthly fugitive emission inspection of fugitive emission sources, during daylight hours, during truck bin loadouts, and under normal operating conditions to ensure that the methods used to reasonably control fugitive emissions are effective. If fugitive emissions are not being reasonably controlled, the permittee shall take corrective action as expeditiously as practicable. The permittee shall maintain records of the results of each monthly fugitive emission inspection. The records shall, at a minimum, include the date of each inspection and a description of the following: the permittee's assessment of the conditions existing at the time fugitive emissions are present (if observed), any corrective action taken in response to the fugitive emissions, and the date of the corrective action was taken. (Permit Condition 5.3)

4.2.4.3.2 Compliance Demonstration Method

If monitoring, testing, recordkeeping, or reporting requirements are not specified in State or Federal rules, then the appropriate compliance demonstration method should be a function of the magnitude and impact of emissions, the emissions unit design, the control equipment used, the ratio of actual emissions to the emissions limit, and the emissions history. (It is understood that the permittee and DEQ will reach agreement on the appropriate level of compliance demonstration necessary for each unit).

An observer shall conduct an inspection of each bin at least weekly while unloading is occurring. In the event any level of visible emissions are present, the permittee shall perform corrective measures on the bin practices or the related unloading area to the extent necessary to address the problem.

A visible emissions evaluation in accordance with the procedures outlined in IDAPA 58.01.01.625 shall be conducted on each bin while unloading on a quarterly basis.

4.2.4.3.3 Monitoring

A observer shall perform an observation of each bin while unloading at least weekly to determine whether any visible emissions are present.

A certified observer shall also perform quarterly evaluations of visible emissions from each bin while unloading, in accordance with the procedures outlined in IDAPA 58.01.01.625.

4.2.4.3.4 Testing

There are no testing requirements associated with establishing compliance with IDAPA 58.01.01.625.

4.2.4.3.5 Recordkeeping

The permittee will record the results of the observer's inspection of each bin while unloading and provide documentation in records according, but not limited to, the content and format listed below:

Date of observation,
Time of observation
Equipment/emission point observed, and
Presence of any visible emission - yes or no.

The permittee must record the results of each quarterly visible emissions evaluation performed on the bins according to the standard requirements for recordkeeping of monitoring information. The record must be maintained in accordance with 1.11 of the permit.

4.2.4.3.6 Reporting

The permittee must submit certified semi-annual reports of all required monitoring listed above. Deviations are to be noted by the permittee and the corrective action(s) taken must be included in the semi-annual report.

### 4.2.5 Emergency Generator (PF-IC-1)

4.2.5.1 Emission Unit Description

The facility operates a diesel-fired emergency generator to provide power to an emergency fire water pump. The engine has a rated capacity of 155 horsepower and runs approximately 15 minutes per week and a total of 15 hours per year for testing and maintenance operation. The engine emits $PM_{10}$, $NO_x$, CO, VOCs, and sulfur oxides ($SO_x$).

4.2.5.2 Permit Requirement - Visible Emissions - [IDAPA 58.01.01.625]

4.2.5.2.1 Applicability

The diesel engine is equipped with an exhaust stack. The stack qualifies as a point source of emissions. Combustion products emitted during engine operation create the potential for the existence of visible emissions. IDAPA 58.01.01.625 states that A person shall not discharge any air pollutant into the atmosphere from any point of emission for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period which is greater than twenty percent (20%) opacity as determined by procedures contained in IDAPA 58.01.01.625.

4.2.5.2.2 Compliance Demonstration Method

This emissions unit operates infrequently for short periods of time, and is not considered to have a significant potential to cause exceedances of the opacity standard. An observer shall monitor the emission stack after warm-up for any opacity greater than twenty percent (20%). (Permit Condition 6.4)

4.2.5.2.3 Monitoring

An observer shall monitor the emission stack after warm-up. In the event any level of visible emissions are present, the permittee shall perform repair or maintenance on the diesel-fired engine to the extent necessary to address the problem. (Permit Condition 6.4)

4.2.5.2.4 Testing

There are no requirements for testing the diesel-fired engine for compliance with the opacity standard.

4.2.5.2.5 Recordkeeping

The permittee will record the results of the uncertified observer's inspection and any procedures followed when the opacity is not within the applicable standard. (Permit Condition 6.4)

4.2.5.2.6 Reporting

The permittee must submit certified semi-annual reports of all required monitoring listed above. Deviations are to be noted by the permittee and the corrective action(s) taken must be included in the semi-annual report. A certification of the compliance status must be submitted annually. (General Provisions 24)

4.2.5.3 Permit Requirement - Sulfur Content in Fuels - (IDAPA 58.01.01.728)

4.2.5.3.1 Applicability

Bennett combusts diesel fuel in the internal combustion engine for the fire pump. The emissions unit is not limited to a specific type of distillate fuel, so both IDAPA 58.01.01.728.01 and IDAPA 58.01.01.728.02 apply. When the emissions unit combusts ASTM Grade 1 (commonly referred to as #1) fuel oil, the sulfur content cannot exceed 0.3 weight percent; and when the emissions unit combusts ASTM Grade 2 fuel oil, sulfur content is limited to 0.5 percent by weight. (Permit Condition 6.1)

4.2.5.3.2 Compliance Demonstration Method

The permittee shall demonstrate compliance by requiring the distributor to provide in writing for each load of fuel purchased the sulfur content of the fuel being purchase by Bennett. No other compliance demonstration is required for this applicable requirement. The likelihood of a violation occurring is not considered high enough to require the permittee to demonstrate compliance any other requirement. (Permit Condition 6.3)

4.2.5.3.3 Monitoring

There are no monitoring requirements for the permittee to perform for determining compliance with the sulfur content limitation.

4.2.5.3.4 Testing

There are no testing requirements for the permittee to perform for determining compliance with the sulfur content limitation.

4.2.5.3.5 Recordkeeping

The permittee shall maintain a record of fuel purchased and a record of the distributor's statement of sulfur content. These records shall be made available to DEQ upon request. There are no recordkeeping requirements for the permittee to perform for determining compliance with the sulfur content limitation. (Permit Condition 6.3)

4.2.5.3.6 Reporting

There are no reporting requirements for the permittee to perform for determining compliance with the sulfur content limitation.

4.2.5.4 Permit Requirement – Fuel Burning Equipment – (IDAPA 58.01.01.675)

4.2.5.4.1 Applicability

The diesel generator is defined by IDAPA 58.01.01.006.41 as fuel burning equipment. Therefore the generator is subject to the applicable standard for liquid fuel in IDAPA 58.01.01.675.

4.2.5.4.2 Compliance Demonstration Method

The permittee shall demonstrate compliance through the visible emissions monitoring. Since this unit is only operated for short periods of time any exceedence after warm up shall be corrected through proper maintenance. The particulate standard does not appear to have a high possibility of any exceedence. It appears to be impractical to request a source test for a unit operated in this manner. Therefore no particulate monitoring or source testing is required.

4.2.5.4.3 Monitoring

There are no monitoring requirements for the permittee to perform for determining compliance with the grain loading standard.

4.2.5.4.4 Testing

There are no testing requirements for the permittee to perform for determining compliance with the grain loading standard.

4.2.5.4.5 Recordkeeping

The permittee shall maintain a record of the visibility monitoring as a reference to the grain loading standard. The record of any maintenance for maintaining the generator within the visibility limit shall be recorded. These records shall be made available to DEQ upon request.

4.2.5.4.6 Reporting

The permittee must submit certified semi-annual reports of all required monitoring listed above. Deviations are to be noted by the permittee and corrective action(s) taken must be included in the semi-annual report. A certification of the compliance status must be submitted annually. (General Provision 24)

## 5. INSIGNIFICANT ACTIVITIES

Listed below are the insignificant activities described by the source in accordance with IDAPA 58.01.01.317:

| Emissions Unit | Description | Insignificant Activities IDAPA Citation Section 317.01(b)(l) |
|---|---|---|
| ST1 | Truck Bark Bin | 30 |
| ST2 | Truck Sawdust Bin | 30 |
| ST3 | Truck Chip Bin | 30 |
| ST4 | Boiler Fuel Storage | 30 |
| ST5 | Auxiliary Fuel Bin | 30 |
| ST6 | Shavings Truck Bin | 30 |
| ST7 | Log Yard Waste 1 | 30 |
| ST8 | Rock Storage | 30 |
| ST9 | Log Yard Waste 2 | 30 |
| ST10 | Ash Storage | 30 |
| TR1 | Hog In Feed Conveyor | 30 |
| TR2 | Bark Conveyor System | 30 |
| TR3 | Hog Out feed Conveyor | 30 |
| TR4 | Bark Screen Oversize | 30 |
| TR5 | Deck Trash Conveyor | 30 |
| TR6 | Truck Bark Bin Conveyor | 30 |
| TR7 | Boiler Bark Conveyor | 30 |

| Emissions Unit | Description | Insignificant Activities IDAPA Citation Section 317.01(b)(l) |
|---|---|---|
| TR8 | Sawdust Conveyor - Vibrator | 30 |
| TR9 | Chip Oversize Conveyor | 30 |
| TR10 | Main Fuel Conveyor | 30 |
| TR11 | Auxiliary Fuel Bin Conveyor | 30 |
| TR12 | Flyash Transport | 30 |
| P1 | Sawmill | 30 |
| P2 | Small Log Debarker | 30 |
| P3 | Large Log Debarker | 30 |
| P4 | Bark Hog | 30 |
| P5 | Bark Screen | 30 |
| P8 | Chip Screen | 30 |
| P9 | Planing Mill - New | 30 |
| P10 | Planing Mill - Old | 30 |
| S1 | 20,000 Gallon Diesel Fuel Tank | (30) |
| S2 | 20,000 Gallon Diesel Fuel Tank | (30) |
| S3 | 20,000 Gallon Gasoline Tank | (30) |
| S4 | 2,500 Gallon Diesel Fuel Tank | (30) |
| S5 | 1,000 Gallon Stove Oil Tank | (30) |
| S6 | 30 Gallon Parts Washer | (2) |
| S7 | 30 Gallon Parts Washer | (2) |
| S8 | 30 Gallon Parts Washer | (2) |
| S9 | 2,000 Gallon Aviation Gas Storage | (30) |
| S10 | 1,000 Gallon Used Oil Tank | (30) |
| ST8 | 2,000 Cubic Yards Rock Storage | (30) |

## 6. ALTERNATIVE OPERATING SCENARIOS

There are no alternative operating scenarios opted by the facility.

## 7. TRADING SCENARIOS

No emissions trading were requested in the permit application.

## 8. EXCESS EMISSIONS

The facility has not reported any excess emissions scenarios in the Tier I OP application dated January 20, 1995, or the updated application December 4, 1998. During startup, shutdown, and scheduled maintenance of the operations at the facility, the reporting to DEQ will be performed under IDAPA 58.01.01.130-136. However, excess emissions of particulate matter from the boiler are predicted to result from maintenance, upset, and breakdown situations. Opacity greater than the twenty percent (20%) standard and an exceedance of the grain-loading standard could also result from these situations. Bennett identifies particulate matter emissions and VOC emissions as potentially occurring from upset and breakdown conditions in the kilns. Startup, shutdown, and scheduled maintenance are also not anticipated to cause excess emissions.

## 9. COMPLIANCE PLAN AND COMPLIANCE CERTIFICATION

### 9.1 COMPLIANCE PLAN

#### 9.1.1 Non-Compliance Issues

Construction and Modification without a PTC

Since Bennett Lumber Products, Inc. was constructed and began operating their facility, several subsequent installations/modifications, have occurred without obtaining a PTC. Because a PTC was not issued to the facility, no emission limits or operational parameters were established to assure and demonstrate that the facility would: 1) comply with all applicable local, state, or federal emission standards as specified in IDAPA 58.01.01.203.01; 2) not cause or significantly contribute to a violation of National Ambient Air Quality Standards, as specified in IDAPA 58.01.01.203.02; and 3) comply with applicable standards for toxic air pollutants as specified in IDAPA 58.01.01.203.03.

This issue will be handled through issuance of a Tier II OP that establishes enforceable emission limits and operational parameters that, when met, assure compliance with the applicable standards and PTC rules. The Tier II OP will not be issued prior to issuance of the Tier I OP. Therefore, a compliance schedule has been developed, as required by IDAPA 58.01.01.314.10.iv. DEQ will be receiving from Bennett Lumber Products, Inc., any requested information that is needed to conduct applicable PTC-related analyses. A letter to Bennett Lumber Products, Inc will be sent no later than June 1, 2001 by DEQ requesting any additional information for the issuance of a Tier II OP to bring the facility into compliance with applicable PTC requirements. The submitted information will be reviewed for its completeness determination.

#### 9.1.2 Compliance Schedule

The following compliance schedule was developed in accordance with the requirements established in IDAPA 58.01.01.314.10.b.

The permittee shall submit all additional information requested by DEQ for issuance of a Tier II OP to establish enforceable emission limits and permit provisions, thereby bringing the facility into compliance with the requirements of obtaining a PTC. Such information shall be submitted to DEQ within 30 days of the request unless a longer time is approved in writing by DEQ.

The permittee shall obtain a Tier II OP by November 30, 2001, unless a later date is set by DEQ. The Tier II OP will establish enforceable emission limits and permit provisions to demonstrate compliance with applicable PTC regulations of IDAPA 58.01.01.200 through IDAPA 58.01.01.223, according to the procedures and schedule specified in IDAPA 58.01.01.404, *Procedure for Issuing Permits.*

The permittee shall obtain a modified Tier I OP within nine (9) months after issuance of the Tier II OP. The Tier I OP will be modified to incorporate the provisions of the Tier II OP.

### 9.2 COMPLIANCE CERTIFICATION

The permittee is required to submit a periodic compliance certification for each emissions unit in the form of an annual report to DEQ and EPA within thirty (30) days after the end of each calendar year. The permittee must certify compliance with all terms and conditions of the permit including, but not limited to, throughputs, flow rates, steam production, emissions calculations, visible emissions standards, and fugitive emissions in accordance with IDAPA 58.01.01.322.11. (Permit Condition 1.10 and 9.21, or General Provision 21)

## 10. HAZARDOUS AIR POLLUTANTS

The hazardous air pollutants (HAPs) emanating from the facility are mostly from the boiler in the form of organic and inorganic compounds. However, the emissions are insignificant.

## 11. CHEMICAL ACCIDENT PREVENTION (49 CFR 68)

Any facility that has more than a threshold quantity of a regulated substance in a process, as determined under 40 CFR 68.115, must comply with the requirements of the Chemical Accident Prevention Provisions of 40 CFR Part 68 no later than the latest of the following dates:

Three (3) years after the date on which a regulated substance present above a threshold quantity is first listed under 40 CFR 68.130; or

The date that a regulated substance is first present above a threshold quantity in a process.

This facility is not currently subject to the requirements of 40 CFR Part 68. (However, should the facility ever become subject to the requirements of 40 CFR Part 68 then it must comply with the provisions contained in 40 CFR Part 68 by the time listed above.)

## 12. AFFECTED STATES NOTICE AND REVIEW

The state of Washington is within fifty (50) miles of the facility. Washington is an "affected state" as defined by IDAPA 58.01.01.008.02. The state of Washington has received a copy of the public comment package as required by IDAPA 58.01.01.364.02, and was provided the opportunity to comment on the draft Tier I OP as provided by 40 CFR 70. No comments were received from the state of Washington.

## 13. AIRS DATABASE

The information contained in the Aeromatic Information Retrieval System database must be updated to reflect the grouping of emissions units and processes of the Tier I OP. The additional edits are contained in Appendix B of this memorandum and reflect the requested alterations.

## 14. REGISTRATION FEES

IDAPA 58.01.01.525 requirements for registering pollutants and registration fees apply to this facility because at the date of drafting this memorandum the facility is a *major facility* as defined by IDAPA 58.01.01.008.14 for the emissions of criteria air pollutants (CO and PM-10). This requirement is addressed by General Provision #16 or Permit Condition 9.16.

The owner or operator of a Tier I source shall pay annual registration fees to the Department in accordance with IDAPA 58.01.01.525 through IDAPA 58.01.01.538.

## 15. RECOMMENDATION

Based on the Tier I application and review of the federal regulations and state rules, staff recommends that DEQ issue a final Tier I OP to Bennett Lumber Products, Inc. for their facility located near Princeton, Idaho.

**RB/bm** G:\AHW\BALDWIN\OP\TIER 1\BENNETT\FINAL\FINAL\FINAL TECH MEMO 057_00008.DOC

cc: DEQ State Office
Lewiston Regional Office
L. Kral, EPA Region X

# Bennett Lumber Products, Inc.
# Princeton, Idaho

## Appendix A

### Spreadsheet

Bennett Lumber Products, Inc
December 9,1999

This spreadsheet is designed to provide a quantity for each criteria pollutant that has an applicable standard stated within the permit for the permitted emissions units.
This spreadsheet indicates the approximate emissions for each of the permitted units under two senarios, (1) the applicable standard and (2) the emission factors accepted by the DEQ or source test filed within the DEQ's source file.

DEQ assumes all PM to be PM-10 unless the facility can provide acceptable information of an emission distinction for that source (emission unit).

| Emission Units Boiler | Estimated #/hr Max. Thruput | Major Pollutant w/ Standard PM-10 gr/sdcf | |
|---|---|---|---|
| Standard | | 0.2 | IDAPA [16.01.01.677] |
| Source test | | 0.04 | Source test performed on April 1-2, 1978. |

Assuming 1900#/MBF

| Kilns | Maximum MBF annual | Maximum #/hr | PM-10 #/hr |
|---|---|---|---|
| Kiln #1 | | | |
| Standard | 22337.28 | 5263 | 7.7 |
| Emission Fact. | 22337.28 | 5263 | 0.8 |
| Kiln #2 | | | |
| Standard | 22337.28 | 5263 | 7.7 |
| Emission Fact. | 22337.28 | 5263 | 0.8 |
| Kiln #3 | | | |
| Standard | 11128.32 | 2622 | 5.1 |
| Emission Fact. | 11128.32 | 2622 | 0.4 |
| Kiln #4 | | | |
| Standard | 22337.28 | 5263 | 7.7 |
| Emission Fact. | 22337.28 | 5263 | 0.8 |
| Kiln #5 | | | |
| Standard | 22337.28 | 5263 | 7.7 |
| Emission Fact. | 22337.28 | 5263 | 0.8 |
| Kiln #6 | | | |
| Standard | 22337.28 | 5263 | 7.7 |
| Emission Fact. | 22337.28 | 5263 | 0.8 |

| Cyclones | Tons/yr | Thruput #/hr | Emission #/hr | Air Flow ACFM | gr/scf | |
|---|---|---|---|---|---|---|
| P6 | | | | | | Assuming scf and acf are approximately equal. |
| Standard | 79.5 | 34.64 | 0.378 | 1393 | 0.0316 | |
| Emission Fact. | 79.5 | 0.02 | 0.00001732 | 1393 | 1.45E-06 | |
| P7 | | | | | | |
| Standard | 15071 | 6566.88 | 8.78 | 2000 | 0.5123 | Discussed within the |
| Emission Fact. | 15071 | 3.28 | 1.64 | 2000 | 0.0958 | technical memorandum |
| P11 | | | | | | |
| Standard | 430 | 1279.76 | 3.29 | 34600 | 0.0111 | |
| Emission Fact. | 430 | 0.64 | 0.32 | 34600 | 0.0011 | |
| P12 | | | | | | |
| Standard | 19556 | 9467.93 | 10.94 | 43000 | 0.0297 | |
| Emission Fact. | 19556 | 4.73 | 2.37 | 43000 | 0.0064 | |
| P13 | | | | | | |
| Standard | 19986 | 9676.11 | 11.08 | 43000 | 0.0301 | |
| Emission Fact. | 19986 | 4.35 | 2.18 | 43000 | 0.0059 | |
| P14 | | | | | | |
| Standard | 19986 | 9676.11 | 11.08 | 43000 | 0.0301 | |
| Emission Fact. | 19986 | 4.35 | 2.18 | 43000 | 0.0059 | |
| P21 | | | | | | |
| Standard | 15071 | 6566.88 | 8.78 | 2000 | 0.5123 | Discussed within the |
| Emission Fact. | 15071 | 3.28 | 0.86 | 2000 | 0.0383 | technical memorandum |
| P24 | | | | | | |
| Standard | 150 | 65.36 | 0.553 | 56307 | 0.0011 | |
| Emission Fact. | 150 | 0.03 | 0.00003266 | 56307 | 6.77E-08 | |

| Wood By-product Handling | Assuming continuous unloading over total operational hours | | | Assuming unloading at maximum rated capacity (application) | | | |
|---|---|---|---|---|---|---|---|
| | | | | | Actual | Maximum | Emission |
| TR13 | Ton/year | #/hr | Emiss. #/hr | | Tons/year | Tons/hr | Tons/year |
| Standard | 20214 | 4718.49 | 7.20 | Max. rate | 20214 | 50 | 25.074 |
| Emission Fact. | 20214 | 4718.49 | 4.72 | | 20214 | 50 | 25 |
| TR14 | | | | Moisture content 47% | | actual unloading rate is 25 T/hr | |
| Standard | 15071 | 3517.97 | 6.04 | Max. rate | 15071 | 50 | 25.074 |
| Emission Fact. | 15071 | 3517.97 | 3.52 | | 15071 | 50 | 25 |
| TR15 | | | | Moisture content 47% | | actual unloading rate is 25 T/hr | |
| Standard | 42509 | 9922.74 | 11.25 | Max. rate | 42509 | 75 | 27.975 |
| Emission Fact. | 42509 | 9922.74 | 9.92 | | 42509 | 50 | 25 |
| TR16 | | | | Moisture content 47% | | actual unloading rate is 50 T/hr | |
| Standard | 19986 | 4665.27 | 7.15 | Max. rate | 19986 | 50 | 25.074 |
| Emission Fact. | 19986 | 4665.27 | 4.67 | | 19986 | 50 | 25 |
| | | | | Moisture content 11% | | actual unloading rate is 25 T/hr | |

Diesel Fire Engine --- no emission estimate are calculated since the applicable standards are opacity and sulfur content.
DEQ approved emission factor for wood by-product unloading is 2.0 # per ton
DEQ approved emission factor for wood by-product cyclones is 0.5 # per ton
DEQ approved emission factor for wood by-product baghouse is 0.001 # per ton

# Bennett Lumber Products, Inc
# Princeton, Idaho

## Appendix B

### AIRS Data Entry Sheet

**ABBREVIATED AIRS DATA ENTRY SHEET**

Name of Facility: Bennett Lumber Products, Inc.

AIRS/Permit #: 057-00008

Permit Issue Date: Proposed Draft

| *Source/Emissions Unit Name (25 spcs) (Please use name as indicated in permit) | SCC # (8 digit #) | Air Program (SIP/NESHAP/ NSPS/PSD) |
|---|---|---|
| *Zurn Industries Hog Fuel Boiler | 10200902 | N/A |
| Cyclones | 30700805 | N/A |
| Baghouse Cyclone, Baghouse | 30700808 | N/A |
| Kilns | 30700898 | N/A |
| Truck Bin Loadouts | 30703002 | N/A |
| | | |
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**RETURN TO PAT RAYNE**
AIRS-PT.LST (9/95)

# Bennett Lumber Products, Inc.
# Princeton, Idaho

# Appendix C

## Comments and Responses

October 5, 2000

STATE OF IDAHO DEPARTMENT OF OF ENVIRONMENTAL QUALITY
RESPONSES TO COMMENTS AND QUESTIONS
SUBMITTED DURING A PUBLIC COMMENT PERIOD
FOR THE DRAFT TIER I OPERATING PERMIT
FOR BENNETT LUMBER PRODUCTS, INC.

Introduction

The public comment period for a Tier I Operating Permit of Bennett Lumber Products, Inc.'s (Bennett) for its Princeton facility of dimensional lumber manufacturing was held from February 9, 2000 to March 10, 2000. Comment packages were made available at the state office of Idaho Department of Environmental Quality (DEQ) in Boise, the DEQ Regional Office in Lewiston, and the Potlatch Community Learning Center. The comment package consisted of Bennett's permit application and attachments, DEQ's completeness determination and technical analysis, and the draft permit. All comments received by DEQ were written comments.

**A) General Comments by the Facility through their Consultant.**

**Comment #1**
**We appreciate the way the permit was organized combining similar operations such as material handling.**

**Response to Comment #1**
Thanks.

**Comment #2**
**Additional information has been collected on CO emissions from the boiler. The test indicated emissions of 672 ppm or 29.5 lb/hr. While these measurements are from a CO meter and not a source test, they are still more accurate than the general AP-42 reference.**

**Response to Comment #2**

The additional information about CO emissions will be very useful for a more accurate emissions inventory of the facility. Since the measured amount of CO for the year exceeds 100 tons per year the facility would remain a Tier I source. Thus there is no change in the facility's permitting requirements.

**Comment #3**
**Bennett Lumber would be willing to add CO emission testing to the required particulate source test to confirm a reliable emission factor.**

**Response to Comment #3**

An official source test for CO would not have any financial advantage for the facility at this time since CO emissions have no fee requirements. Thus DEQ at this time sees no reason to apply a source test for CO and additional cost for the facility.

**Comment #4**

**Visible emission from dry kilns**
**Dry kilns emit water vapor and VOCs. Opacity is not a concern, except in the case of fire. The emissions are basically all steam, and each kiln will have several vent stacks. Conducting visible emissions testing on dry kilns is an unnecessary burden. It is also our understanding that other facilities may not be required to conduct such inspections.**

**We request that all references to visible emission inspections, monitoring and reporting related to dry kilns be deleted from this permit.**

**Response to Comment #4**

Test have shown that a kiln emits PM and VOCs. The vents of a kiln are subject to the applicable standard of Opacity and Process Weight Limitation Rule. While the permit has been changed to account for no calculations of the Process Weight Rule, (see technical memorandum for explanation) the Opacity Rule is in affect and will be stay within the permit. There has been an incentive added to the requirement that could lessen the amount of observations, monitoring, and reporting.

**Comment #5**

**Inspections/monitoring/reporting**
**The need for documentation and record keeping is not in question. Yet these proposed daily, weekly, and monthly, semi annual and annual requirements are confusing - to even to the most diligent of employees.**

**The usefulness of the inspections and records are also lost in trying to make them fit "a schedule". A weekly inspection may be conducted and recorded every Friday afternoon, when upsets only occur Monday mornings. The "records" will show "no entries", even though there really is a problem. This does not meet the intent of the permitting authorities, nor does it assist a facility identifying and addressing a problem.**

**We suggest modifying such inspections and records to be similar to the recorded entries for odors. To simply *record upsets when they occur.* This makes sense for many timber and wood processes such as cyclones, dryers, bins etc, because it is *visually evident* when an upset occurs.**

**Response to Comment #5**

Each of the inspections, monitoring requirements, and reports are designed to demonstrate compliance to an applicable standard for those emission units. The frequency of these inspections are designed to facilitate any necessary corrective action should an exceedence occur. Several timelines have incentives to reduce these inspections through quality operations at the facility. The inspections, monitoring requirements, and reporting will be reviewed during the permit handoff meeting with the facility. Keep in mind the facility-wide requirements for exceedences.

**Comment #6**

**Semi annual reporting**
**Unless there is a regulatory requirement, we request that for paperwork reduction and simplicity, that all reports be submitted annually.**

**Response to Comment #6**

Semi-annual reporting is a requirement of IDAPA 58.322.08.c.

**Comment #7**

**The O & M manuals can be prepared for IDEQ within 60 days. However, we request that the manuals be able to remain on site. While IDEQ is welcome to access them at any time, the manuals will require money and manpower to develop, which Bennett Lumber does not wish to share with its competitors. This is not a request for confidential information - it is simply a request to be able to keep the manual on site if there is no justifiable reason for keeping it in IDEQ files as well.**

**Response to Comment #8**

The O&M Manuals will be prepared by the facility and have adequate information to show continuous compliance and have the procedures to be followed when a potential exceedence may occur. This manual will be presented to DEQ for review of its content for the above-mentioned purposes and will be returned to the facility. It is the facility's responsibility to maintain and update this manual and be able to present it to a DEQ representative upon request.

**B) <u>Technical Memo Comments by the Facility through their Consultant</u>:**

**Comment #1**

**Contact - under Memorandum**

**Change contact person to Jeff Abbot, telephone 208-875-1121**

**Response to Comment #1**

The change request of Comment #1 has been made.

**Comment #2**

**Throughput quantities**
**The technical memo may have been started after the original application submission. An updated amendment was mailed in 1998 which changed some of the quantities slightly. If it is necessary for the technical memo to mathematically support the permit, all throughput quantities in the technical memo should be updated. The operating hours and list of equipment, etc. remain unchanged from the 1995 to the 1998 information.**

**Response to Comment #2**

The quantity throughput of the emissions units have been updated to reflect the 1998 updated application quantities.

**Comment #3**

**Throughput ratio - pg 1 of 26 - parag 4.1.1**
**The assumed shows a 2:1 of MBF lumber to MBF logs ratio. Actually, the ratio is more like 3:2 (and use the 102,316 MBF from 1998 amendment.)**

**Also the "2 inches and larger" should read " 2 inches and smaller".**

**Response to Comment #3**

The corrections stated within Comment #3 have been implemented into the technical memorandum.

**Comment #4**

**Permit applications - pg 2 of 26 - parag 4.1.4**
**A facility wide PTC application was submitted May 22, 1996. (This application was not included on the application list.)**

**Response to Comment #4**

The facility-wide PTC application has been added to the application list.

**Comment #5**

**Fire Pump Engine - 5.0 - pg 5 of 26**
**The John Deere fire pump engine listed is actually a "diesel standby generator". (Our mistake in September 1999 letter.) It also runs less than 15 hours per year. (Only 15 minutes and only once a week - for test purposes and if required for fire fighting.) We request that it be removed to insignificant activities.**

**Response to Comment #5**

The John Deere fire engine is to large to qualify for the insignificant list. This engine is subject to applicable standards, opacity standard and fuel sulfur content standard. The title of this emission unit has been change to Emergency Generator.

**Comment #6**

**Boiler Stack Temperature - 5.1.1. - pg 6 of 26**
**The *minimum* boiler stack temperature is 250 degrees Fahrenheit. (610 degrees is representative of the average temperature.)**

**The boiler is fueled by sawdust, bark, and wood shavings only. (Delete reference to hog-fuel - red and white fir".)**

**Response to Comment #6**

The requested changes in Comment #6 have been inserted within the technical memorandum.

**Comment #7**

**Applicable Standards - 5.1.2(a) - pg 6 of 26**
**The boiler has a maximum rated heat input capacity of greater than 10 mBTU/ hr.**

**Response to Comment #7**

The standard that applies to the boiler is the IDAPA 58.677, which has a size or and installation date. This boiler meets the installation date requirement.

**Comment #8**

**Emission Unit Descriptions - Manufacturers - 5.2.1 - pg 10 of 26**
**It is not critical but for the record: P15 and P16 are both Moore kilns; P17, P18, and P19 were manufactured by LSI; and P20 was manufactured by Wellons, Inc.**

**Again, the throughput quantities were updated in 1998.**

**Response to Comments #8**

These corrections have been implemented into the technical memorandum.

**Comment #9**

**Dry Kilns - pg 12 of 26 - para 5.2.2(b) and (c)**
**Refer to General Comments #5 and #7**

**Response to Comment #9**

The opacity standard for the kilns starts as a weekly observation. These weekly observations can be extended to quarterly observations provided that the performance of the emissions unit qualifies.

**Comment #10**

**Monitoring - under process weight - visible emissions? 5.2.2 (c) pg 12 of 26**
**There appears to be a typo. The proposed dry kiln visible emission requirement is listed under section 5.2.2 - Process Weights. It is repeated in (the cyclone section) section 5.3.2. The 5.3.2 section may need to remain, but refer to cyclones, etc.**

**Also refer back to General Comments (4).**

**Response to Comment #10**

The word "cyclone" has been removed and the words "kiln vents" have been inserted. The incentive program of weekly to quarterly observations, monitoring, and reporting was inserted also.

**Comment #11**

**Stack Temps 5.3.1 - pg 13 of 26**
**The stack temperatures are *ambient* and outdoors. It seems there is some confusion since the application forms only asked for "temperature", and the data has been assumed to be minimum. It will definitely be colder than 65 degrees at all the stacks.**

**Response to Comment #11**

The temperature for cyclones and cyclone baghouses is now stated as ambient for all stacks.

**Comment #12**

**Compliance Demonstration 5.3.2(b) - pg 15 of 26**
**Refer to General Comments #5 and #7 above.**

**Response to Comment #12**
General Comment #5 refers to inspection/monitoring/reporting. These were discussed in the response to the general Comment #5 above.

General Comment #7 refers to the O&M Manuals.
These were discussed in the response to general Comment #7 above.

**Comment #13**

**Cyclones 5.3.2(e) - pg 16 of 26**
**There is no physical way to measure the monthly throughput of each and every cyclone. The flow chart developed and provided in the permit application, was our best estimate using annual quantities of known production volumes, material sold, etc. We request that this section be modified to "estimate annual throughput volume of each cyclone". (Or duplicate 5.2.2 (f) reporting of dry kilns.)**

**Response to Comment #13**

Based on the applicant's submittal, the average emissions (lb/hr) are about 20% of the allowable emissions determined by the process weight rate. These calculations can be found in Appendix A of the technical memorandum. Since these emissions are such a small percentage of the standard, the possibility of any exceedence is very small. Therefore the monitoring of the throughput and the hours of operation are not required.

**Comment #14**

**Cyclones 5.3.3(b) and (c) - pgs 16 and 17 of 26**
**Refer to General Comments #5 above. If is applicable to cyclones , kilns, bins, etc.**

**Response to Comment #14**

Yes, the Compliance Demonstration Method and Monitoring Method stated with the sections of the technical memorandum for kilns, cyclones, and bins are applicable.

**Comment #15**

**Fire Pump Engine - 5.5 - pg 21 of 26**

**Same as comment #4 above.**

**Response to Comment #15**

The fire pump engine does not qualify as insignificant. The fire pump engine is subject to the opacity standard and the fuel sulfur content standard. These are both addressed within the technical memorandum and permit.

**Comment #16**

**Attachment to Tech Memo**
**What was the basis for the broad assumption "that all PM is PM -10"? The facility has collected several by product samples, and conducted sieve analyses. (These samples were submitted to IDEQ as part of the old cyclone emission calculations.) We believe that IDEQ *does not* have sufficient justification to make this assumption.**

**Response to Comment #16**

DEQ has made the determination that all PM is $PM_{10}$ unless the facility can provide acceptable supported documentation that would identify the quantity of $PM_{10}$ from that of PM for a long time. The sieve analysis which has been presented to date for several wood operations have not received official departmental approval. In the calculations mentioned within the attachment above, the consideration that all PM as $PM_{10}$ would produce the most conservative (worst case) scenario. This scenario thus shows that at worst case the emissions are small compared to the standard, thus if $PM_{10}$ were only a fraction of the PM these calculations of $PM_{10}$ would even be a smaller fraction of the PM as determined by the standard.

**C) <u>Permit Comments by the Facility through their Consultant</u>:**

**Comment #1**
**Contact Person. Please change contact person to Jeff Abbott. Jeff was hired after the most recent application update of 1998.**

**Response to Comment #1**
The requested change has been made.

**Comment #2**
**Records and inspections - pg 3 and 4 of 34. Same as General Comment #5**
**General comment #5 states Inspections/monitoring/reporting**
**The need for documentation and record keeping is not in question. Yet these proposed daily, weekly, monthly, semi annual and annual requirements are**

**confusing - to even to the most diligent of employees.**

**The usefulness of the inspections and records are also lost in trying to make them fit "a schedule". A weekly inspection may be conducted and recorded every Friday afternoon, when upsets only occur Monday mornings. The "records" will show "no entries", even though there really is a problem. This does not meet the intent of the permitting authorities, nor does it assist a facility in identifying and addressing a problem.**

**We suggest modifying such inspections and records to be similar to the recorded entries for odors. To simply *record upsets when they occur*. This makes sense for many timber and wood processes such as cyclones, dryers, bins etc, because it is *visually evident* when an upset occurs.**

**Response to Comment #2**

Each time span for inspections, observations, and reporting is in a effort to show the continuation of compliance or to avoid an out-of compliance situation. The reporting time spans are determined by the Rules (Idaho Air Pollution Adminitrative Procedures) or are approved as appropriate for demonstration of compliance.

**Comment #3 A.9.4. pg 8 and 9 of 34**

**We need some clarification on the 15 days, calling ahead, reporting frequency, keeping on site vs submitting to agency, and also submitting semi annual reports.**

**Response to Comment #3**
Each of these will be explained within the permit hand-off process.

**Comment #4 A.9.5.2. - pg 9 of 34**

**It is not clear whether the maintenance plans referred to in this section, are the same as the O & M manual referred to elsewhere.**

**Response to Comment #4**

Each section that specifically states that an O&M Manual will be developed implies that there will be an O&M Manual for the emissions units within that section. The O&M Manual referenced within Section A that an O&M Manual will be developed for any emissions unit or section of an emission unit(s) that does not have an O&M Manual specifically stated as a requirement within that emissions unit's section in the permit.

**Comment #5**
**B.1. - pg 13 of 34 as referred to earlier, the boiler has a heat input capacity of greater than 10 million BTU.**

**Response to Comment #5**

The statement that is referred to above is within the direct quote of IDAPA 58.01.01.677 which includes the date of installation **or** the size of the BTU production. In the case of this permit and the facility being permitted, the date of installation makes the boiler applicable to this rule.

**Comment 6. It is possible for the multiclone pressure drop to go below 80%. We request the allowable drop to be changed from 80% to 120 % range to 60% to 120%.**

**Answer to Comment 6.**
The operating range of the pressure drop for the multi-cyclone shall be no less than 80% and no greater than 120% of the average pressure drop recorded during the approved performance test. If the pressure drop can not be maintained within this range, the facility should do another performance test to determine the appropriate operating range of the multi-cyclone pressure drop.

**Comment 7.**
**It is possible for the wet scrubber pressure drop to go below 80%. We request the allowable drop to be changed from 80% to 120% range to 60% to 120%.**

**Answer to Comment 7.**
The operating range of the pressure drop for the wet scrubber shall be no less than 80% and no greater than 120% of the average pressure drop recorded during the approved performance test. If the pressure drop can not be maintained within this range, the facility should do another performance test to determine the appropriate operating range of the wet scrubber pressure drop.

**Comment 8.**
**B.8 and B.9 appear to be contradictory. If might be a 'cut and paste' typo. Would suggest scratching B.8 and retaining B.9**

**Answer to Comment 8.**
B.8 deals with installing, operating, calibrating, and maintaining the continuous monitoring device for the wet scrubber and multi-cyclone.

B.9 deals with monitoring and recording the pressure drop readings from this continuous measurement device for the multi-cyclone and the wet scrubber on a daily basis.

These two requirements are not the same or do they contradict each other. They will stay as written with the addition of a set time limit for repair or replacement.

**Comment 9.**
**Repeat of Comments of B.4 and B.8**

**Response to Comment 9.**
The section B.11 requires weekly visible emissions evaluations in accordance with procedures of IDAPA 58.01.01.625. This requirement will remain as written.

**Comment 10.**
**B. 13 Refer to General Comment 6 above.**

**Response to Comment 10.**
B.13 refers to the O&M Manual that shall be developed and followed by the Permittee. The O&M Manuals will be prepared by the facility and have adequate information to show continuous compliance and the procedures to be followed when a potential exceedence may occur. This manual will be presented to DEQ for review of its content for the above-mentioned purposes and will be returned to the facility. It is the facility's responsibility to maintain and update this manual and be able to present it to a DEQ representative upon request.

General Comment #6 refers to semi-annual reporting. The semi-annual reporting is stated within IDAPA 58.322.08.c

**Comment 11.**
**Heading typo error on page 20 of 34**
**The page header on page 20 should read 'Dry Kilns' (still in Emission Group 2)**

**Response to Comment 11.**
Error was noted and has been corrected.

**Comment 12.**
**Dry Kilns Emissions - pg 20 of 34**
**Refer to General Comments #4 and #5.**

**Response to Comment 12**
Comment #4 refers to the request of having all references to visible emissions inspections, monitoring, and reporting on dry kilns deleted from this permit.

Comment #5 refers to modifying inspections and records to be similar to the recorded entries for odors, such as simply recording upsets when they occur.

One of the principle requirements of a Tier I permit is the ability to show continuous compliance and not just report when out of compliance incidents are indicated. Thus the requirement for periodic monitoring of the emission points of the various emission units, (kilns included) will

remain as written.

Permit condition C.4 states that weekly observances of visible emissions from the drying kilns will be performed; however, these do not have to be performed by a certified observer. Permit condition C.4 also outlines the minimum amount of information that is to be recorded during these observances.

Permit condition C.5 states that once each quarter the visible emissions shall be determined by use of the methods and procedures outlined in IDAPA 58.01.01.625. Permit condition C.5 also contains a section that provides performance incentives to allow for monthly and quarterly observances.

For example at the end of the six-month period of monthly monitoring, if the opacity has consistently been 0%, monitoring may become quarterly with DEQ approval. If at any time there are visible emissions observed then the baseline would be reset (i.e., inspections would revert to monthly until six consecutive months of acceptable observations were recorded).

These shall remain as written.

**Comment 13.**

**D.4 - pg 23 of 34 Refer to General Comment #6 above**

**Response to Comment 13.**

Comment #6 requests to having all semi-annual reporting changed to annual reporting.

On of the principle requirements of a Tier I permit is the ability to show continuous compliance and not just report when out of compliance incidents are indicated. Thus, the periodic monitoring of the emissions points of the various emission units, cyclones, baghouse cyclone, and baghouse will remain as written.

The records mentioned in Condition D.4 for visible emissions observations are to be kept on a weekly basis showing at minimum the information required in permit section D.4.1. If an observance indicates that corrective action is necessary than the Permittee shall promptly follow the procedures in the O&M Manual for the emissions units involved. These reports are an additional source of information that would show the Permittee's ability to show continuous compliance. The visibility measurement also has an additional performance incentive to extend these observations to monthly and quarterly.

**Comment 14.**
**D.7 - pg 23 of 34**

**Same comment as Technical Memo comment #12. There is no physical way to measure monthly quantities. (Even records of what was sold or shipped, do not reflect what was produced.) It is possible to estimate annual quantities, and then divide by 12.**

**If the concern is compliance with process weight rules, we should consider the fact that the requested permits limits are 120% of anticipated actual quantities. And that even this maximum quantity was shown to be within process weight limits.**

**Same comment as Technical Memo comment #12**

**Tech Memo states Compliance Demonstration 5.3.2(b) - pg 15 of 26**
**Refer to General Comments #5 and #7 above.**

**General Comments #5 and #7 have been restated below.**

#5) **Inspections/monitoring/reporting**
**The need for documentation and record keeping is not in question. Yet these proposed daily, weekly, monthly, semi annual and annual requirements are confusing - to even to the most diligent of employees.**

**The usefulness of the inspections and records are also lost in trying to make them fit "a schedule". A weekly inspection may be conducted and recorded every Friday afternoon, when upsets only occur Monday mornings. The "records" will show "no entries", even though there really is a problem. This does not meet the intent of the permitting authorities, nor does it assist a facility in identifying and addressing a problem.**

**We suggest modifying such inspections and records to be similar to the recorded entries for odors. To simply *record upsets when they occur*. This makes sense for many timber and wood processes such as cyclones, dryers, bins etc, because it is *visually evident* when an upset occurs.**

#7) **The O&M manuals can be prepared for IDEQ within 60 days. However, we request that the manuals be able to remain on site. While IDEQ is welcome to access them at any time, the manuals will require money and manpower to develop, which Bennett Lumber does not wish to share with it's competitors. This is *not* a request for confidential information - it is simply a request to be able to keep the manual on site if there is no justifiable reason for keeping it**

**in IDEQ files as well.**

**Response to Comment 14.**

The monitoring and recording frequencies stated within the permit are designed to assist in the facility's ability to show continuous compliance. The O&M Manual that is to be designed by the Permittee shall have specific directives to follow should a potential situation occur that could interrupt the facility's ability to maintain compliance with the permit.

Since the estimated emissions from the cyclones, cyclone baghouse, and baghouse are less that 25 % of the applicable requirement, it will be more applicable to apply a visibility rule and refrain from monitoring the throughput.

An acceptable method of using these visible observations is having the observations performed on a weekly basis. At the end of the six-week period of weekly monitoring, if the opacity has consistently been 0%, monitoring may be come monthly with DEQ approval. If at any time there are visible emissions observed, then the baseline would be reset (i.e., inspections would revert to weekly until six consecutive weeks of acceptable observations were recorded).

The O&M Manual will be written by the Permittee. DEQ will be given a copy to review to ensure that it has the ability to maintain continued compliance with the permit. The O&M Manual should also address the actions that will be taken by the Permittee should a situation arise that would indicate the inability of the emissions unit to comply with the permit.

**Comment #15**
**E.7 - pg 26 of 34**
**Same as comment #14 above.**

**Same comment as Technical Memo comment #12 which states there is no physical way to measure monthly quantities. (Even records of what was sold or shipped, do not reflect what was produced.) It is possible to estimate annual quantities, and then divide by 12.**

**If the concern is compliance with process weight rules, we should consider the fact that the requested permits limits are 120% of anticipated actual quantities. And that even this maximum quantity was shown to be within process weight limits.**

**Response to Comment #15**

This comment involves the storage bin loadout to trucks. These trucks can be weight before and after loading. The time of loading can be measured. All of the wood by-product after reaching the truck is either used at the facility or sold. The permittee is responsible to calculate the process weight limitation for each applicable unit using the appropriate formula within the permit. The permittee is to record the throughput and the time used during the unloading of the appropriate unit.

**Comment #16**
**F - pg 27 of 34**
**Same comment as Technical Memo Comment #4**

**Technical Memo Comment #4 is Permit applications - pg 2 of 26 - parag 4.1.4**
**A facility wide PTC application was submitted May 22, 1996. ( This application was not included on the application list.)**

**Response to Comment #16**

Section F of the permit covers the Fire Pump Engine. The fire pump engine was not mentioned in the PTC application that was submitted May 22, 1996.

If this comment refers to technical memorandum Comment # 5 which does refer to the fire pump engine, then this will be addressed below. The fire pump engine is of a size that does not quality for the insignificant rule of IDAPA 58.01.01.317. Opacity and fuel sulfur standards are applicable to this engine; therefore, this engine is mentioned within the permit.

**D. <u>EPA's Comments on Draft Permit for Bennett Lumber Products</u>**

**Comment #1**

**Page 3 of 34, Facility Wide Condition A.3: It isn't clear when the permittee must initiate corrective action. We strongly suggest that the permittee initiate corrective action as soon as possible and no later than 24 hours after the complaint was received or fugitive/visible emissions were detected.**

**This comment also applies to Condition A.4-fugitive emissions, A.6-complaint, A.8-visible emissions.**

**Response to Comment #1**

The staff of DEQ and EPA have reached an agreement concerning the working of the Facility-wide Conditions of Tier I permits.

**Comment #2**

**Page 5 of 34, Condition A.9.2.2: In the last sentence, we believe you have a typo. We suggest replacing Section A.9.2.3 with Section A.9.3.3.**

**Response to Comment #2**

The staff of DEQ and EPA have reached an agreement concerning the working of the Facility-wide Conditions of Tier I permits

**Comment #3**

**In the Facility Wide Condition A.9, IDAPA 58.01.01.130-136 are listed as applicable requirements. However, we couldn't find in the permit or the Technical Analysis where the following sections were discussed:**

**133.02: Startup, Shutdown, and Schedules Maintenance Requirements - Excess Emission Procedures**

**134.04: Upset, Breakdown and Safety Requirements - Excess Emission Procedures**

**If these sections are not applicable to the source or if they are applicable and the conditions have already been met, then they can be discussed in the Technical Analysis.**

**Response to Comment #3**

The staff of DEQ and EPA have reached an agreement concerning the working of the Facility-wide Conditions of Tier I permits

**Comment #4**

**Page 7 of 34, In Condition A.9.3.2.3, we believe you have a typo. We suggest replacing Sections A.9.3 and A.9.4 with Sections A.9.4 and A.9.5.**

**Response to Comment #4**

The staff of DEQ and of EPA have worked to an mutual agreement of the Facility Wide Conditions of Tier I permits.

**Comment #5**

**Page 10 of 34, Facility Wide Conditions: It isn't clear why Conditions A.11 through A 14 are not listed in the summary of requirements table under Section A on page 3 of 34. For clarification, we suggest you add Conditions A.11 and A.14 to the table.**

**Response to Comment #5**

The staff of DEQ and EPA have reached an agreement concerning the working of the Facility-wide Conditions of Tier I permits

**Comment #6**

**Page 10 of 34, Condition A.14: As previously discussed, the following is a copy of the 112r language that we suggested for the boiler plate facility wide conditions.**

***[Suggestion: Paragraph (a) OR (b) should be included in every permit. If the source is not presently subject to part 68, include paragraph (a). If the source is subject to part 68, include paragraph (b).***

**(a) A permittee of a stationary source that has more than a threshold quantity of a regulated substance in a process, as determined under 40 CFR X68.115, shall comply with the requirements of the Chemical Accident Prevention Provisions at 40 CFR Part 68 no later than the latest of the following dates:**

**(I ) Three years after the date on which a regulated substance present above a threshold quantity is first listed under 40 CFR X 68.130; or**

**(II) The date of which a regulated substance is first present above a threshold quantity in a process. [40CFRX68.10(a)]**

***The following is some good language we have seen in the Statement of Basis describing the above paragraph:***

**"xxx.Chemical Accident Prevention Program - 40 CFR part 68**

**The Chemical Accident Prevention Program requires sources who use or store regulated substances above a certain threshold to develop plans to prevent accidental releases. Based on the permittee's application, the permittee currently has no regulated substances above the threshold quantities in this rule and, therefore, is not subject to the requirement to develop and submit a risk management plan. This requirement is included in the permit because the permittee has an ongoing responsibility to submit a risk management plan IF a substance is listed that the permittee has in quantities over the threshold amount or IF the permittee ever increases the amount of any regulated substance above the threshold**

**quantity. Including this term in the permit minimizes the need to reopen the permit if the permittee comes subject to the requirement to submit a risk management plan."**

***OR***

(b) ***[Suggestions: The following language should be included in permits for all sources subject to part 68, whether or not an RMP has been submitted. If the source is subject to part 68 and has not registered and submitted an R MP, a compliance schedule for registering and submitting the RMP should be added to the permit]***

**This facility is subject to part 68 and shall certify compliance with all requirements of 40 CFR part 68, including the registration and submission of the RMP, as part of the annual compliance certification as required by 40 CFR X70.6(c)(5) (and/or you could site to the section of the permit that addresses annual compliance certification).**

**[40 CFR X 68.215(a)(ii)]**

**Response to Comment #6**

The staff of DEQ and EPA have reached an agreement concerning the working of the Facility-wide Conditions of Tier I permits

**Comment #7**

**We could not find any condition for the Recycling and Emissions Reduction Program - 40 CFR 82 Subpart F. If this is an applicable requirement, then it must be in the permit.**

Response to Comment #7
The staff of DEQ and EPA have reached an agreement concerning the working of the Facility-wide Conditions of Tier I permits
The staff of DEQ and of EPA have worked to an mutual agreement of the Facility Wide Conditions of Tier I permits.

**Comment #8**

**Page 11 of 34, Condition A.15: As previously discussed, we strongly suggest deleting "Or Department approved alternative in accordance with IDAPA 58.01.01.157" from the Special Conditions section of the table and adding it as an asterisk under the table.**

**Response to Comment #8**

The staff of DEQ and EPA have reached an agreement concerning the working of the Facility-wide Conditions of Tier I permits

**Comment #9**

**Page 14 of 34, Condition B.4: Allowing the source twelve (12) months after issuance of the Title V permit to demonstrate compliance with the grain loading standard initially is inadequate. EPA believes that the source should be allowed no longer than three (3) months after issuance of the Title V permit to demonstrate compliance with the grain loading standard. Additionally, if there is any appropriate alternative periodic monitoring, we would strongly suggest DEQ tie that into the first three (3) months prior to the performance test.**

**We believe there is a typo in the first and last paragraph of B.4. We suggest the Section A.11 be replaced with Section A.16 and Section A.10 be replaced with Section A.16, respectively.**

**Condition B.5: We believe there is a typo in Condition B.5 also. We suggest that Section A.11 be replaced with Section A.16.**

**Response to Comment #9**

The time of the performance test has been reduced to be within three (3) months after issuance of the permit. The additional monitoring of the steam production and the parameter of the multi-cyclone and wet scrubber will remain within the permit.

The appropriate Section changes and /or replacements have been performed.

**Comment #10**

**Page 16 of 34, Condition B.9: states that "*In the event the pressure drop measurement device becomes inoperable, it shall be repaired or replaced as soon as practical.*" During such a time is there an appropriate backup monitoring method? I would strongly suggest, at the least, requiring them to notify DEQ within 24 hours in the event that the pressure drop measurement device does become inoperable and requiring them to give a time line as to when it will be repaired.**

**Response to Comment #10**

DEQ has added the following statement to Condition B.9: "The Permittee shall monitor and record the pressure drop readings across the Zurn Industries hog fuel boiler multi-cyclone and wet scrubber daily. In the event the pressure drop measurement device becomes inoperable, the DEQ shall be notified within 24 hours and a timeline shall be established for repair or

replacement of the monitoring device."

**Comment #11**

**Page 17 of 34, Condition B.13: states that *"an O&M Manual shall be developed and submitted to DEQ for approval..."*. EPA believes that Condition B.13 must also require the source to update the O&M Manual accordingly (i.e., after each performance test in order to incorporate the appropriate ranges, etc.)**

**Response to Comment #11**

Permit condition B.13 now reads: "An Operation and Maintenance (O&M) Manual shall be developed and followed by the Permittee and submitted to DEQ for approval within sixty (60) days of issuance of this permit. The O&M Manual shall address the operation, maintenance, and repair of both the hog fuel boiler's multi-cyclone and wet scrubber. The O&M Manual shall be updated as necessary and at a minimum include the most recent general descriptions of the equipment; the normal operational ranges of the pressure drops for the multi-cyclone and wet scrubber; the normal operating conditions and procedures of the boiler; startup, shutdown, and maintenance procedures; upset conditions guidelins; and corrective action procedures."

**Comment #12**

**Page 20 of 34, Condition C.4: It isn't clear when the permittee must initiate corrective action. We strongly suggest that the permittee initiate corrective action as soon as possible and no later than 24 hours after detection of visible emissions.**

**This comment also applies to Conditions D.4, E.4.**

**Condition C.4.1: We believe there is a typo in this condition. We suggest replacing Section A.7 with Section A.8.**

**This comment also applies to Conditions D.4.1, E.4.1.**

**Condition C.4.1: states *"the results of each observation shall be recorded and maintained as required in Section A.8 of this permit, and shall include the following information:"* We suggest adding language such as *"...and shall include, but not be limited to the following information:"***

**This comment also applies to Conditions D.4.1, E.4.1.**

**Response to Comment #12**

Response to comments on Condition C.4, D.4, and E.4: The draft permit has been changed to read "If visible emissions are present, the Permittee shall within twenty-four (24) hours follow the procedures specified in the O&M Manual. The Permittee shall record if any corrective action is necessary, and if so what corrective action was taken".

Response to comments on Condition C.4.1, D.4.1, and E.4.1: Section A.7 has been replaced with Section A.8 for each of these conditions.

Response to comments on Condition C.4.1, D.4.1, and E.4.1: The words "but not limited to" have been included into each of these conditions. The phase now read "The results of each observation shall be recorded and maintained as required in Section A.8 of this permit, and shall include, but not be limited to, the following information:"

**Comment #13**

**Page 20 of 34, Condition C.7: DEQ must also require the source to calculate the process weight in order to show compliance with IDAPA 58.01.01.701-702.**

**This comment also applies to Conditions D.7, E.7.**

**Response to Comment #13**

The permit condition has been changed. This Permit Condition C.7 now reads "The Permittee shall maintain a record containing the monthly throughput, the calculated process weight rate limitations using the appropriate formula within section(s) C.1 and/or C.2 on each of the process equipment affected by the process weight rule, and the hours of operation for each of the process equipment each month."

This same change was made for Condition E.7.

Response to comment for Condition D.7: After several discussion with EPA it was decided that since the maximum potential emission from the throughput of the cyclones, baghouse cyclone and baghouse when compared to the calculations of the process weight were very small in comparison then the calculations of the process weight limitations, the throughput monitoring and the hours of operation could be eliminated from the permit. Condition D.7 has be eliminated from the permit. However, the observations and visibility monitoring are still in effect within the permit.

**Comment # 14**

**Page 26 of 34, Condition E.7: DEQ must also require the source to keep the hours of operation along with calculating the process weight (see comment 13).**

**Response to Comment #14**

As mentioned in the response to Comment #13, the hours of operation are included with the calculation of the process weight rate for Condition E.7

**Comment #15**

**Page 27 of 34, Condition F.3: It isn't clear what the intent of this condition is. The "obtain annually" is very confusing. It should be made clear that the permittee must keep a current record of the fuel type and sulfur content, and it should be updated accordingly.**

**Response to Comment #15**

Condition F.3 has been changed to read "The Permittee shall obtain documentation of fuel sulfur content from each fuel supplier for its supply of fuel at least annually. If there is a change of fuel sulfur content, the Permittee shall obtain appropriate documentation from the supplier. The Permittee shall keep documentation in accordance with Permit Condition A.11."

**Comment #16**

**Page 27 of 34, Condition F.4: EPA believes that semi-annual visible emission evaluations are too infrequent to ensure compliance with the opacity standard. Since the Fire Pump Engine operates so infrequently, we strongly suggest that every time the Fire Pump is fired up that a visible emission observation be made after warm-up. See Technical Analysis 5.5.2 (c) Monitoring on page 21 of 26 for appropriate monitoring that should be added to the permit. In addition to the visible emission observation, we strongly suggest that you require the permittee to conduct at the minimum quarterly visible emission evaluation in accordance with the methods and procedures of IDAPA 58.01.01.625.**

**Response to Comment #16**

The draft Condition F.4 has been changed to read "The Permittee shall conduct visible emissions evaluations on the fire pump engine stack every time the fire pump is fired up and the engine has warmed up. The Permittee shall conduct at the minimum a quarterly visible emissions evaluation to determine compliance with Section F.2 of this permit, in accordance with the methods and procedures contained in IDAPA 58.01.01.625. The visible emissions evaluation shall be performed during daylight hours under normal operating conditions. The results of each evaluation shall be recorded. The records shall be maintained as required in Section A.11 of this permit."

October 4, 2000

# STATE OF IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY (DEQ) RESPONSES TO COMMENTS AND QUESTIONS SUBMITTED DURING A PUBLIC COMMENT PERIOD FOR THE PROPOSED TIER I OPERATING PERMITS FOR: CHEVRON PIPELINE CO. (NORTHWEST TERMINALLING CO.), AND AVISTA CORP. FACILITY-WIDE CONDITIONS

## Introduction

A public comment period for the Chevron Pipeline Company and Northwest Terminalling Company draft Tier I operating permit for the Boise, Idaho terminal was held from August 10, 2000 through September 11, 2000. A public comment period for the Avista Corporation draft Tier I operating permit for the Rathdrum, Idaho combustion turbine was held from August 9, 2000 to September 8, 2000. Comments were received from the Idaho Association of Commerce and Industry (IACI), and incorporated by reference into comments received from Micron Technology. The comments are in reference to the facility-wide requirements of the permits, which contain generally applicable requirements. The facility-wide requirements are included in all Tier I operating permits and, therefore, the comments received on this section of the permit may affect all Tier I permits issued within the State of Idaho. Therefore, the comments and DEQ's responses are included as part of this permit package.

**Comment A.3 & A.4:** There is no applicable legal requirement for a permittee to "take appropriate corrective action as expeditiously as practicable after a valid [dust] complaint is received" as proposed in A.3, or, "if fugitive dust is not being reasonably controlled, ...take corrective action as expeditiously as practicable" as proposed in A.4. ...DEQ should, therefore, delete the second sentence in Condition A.3, and the second sentence in Condition A.4, which are inapplicable and inappropriate.

**DEQ Response:** The permit has not been changed to reflect this comment. The requirement specified in IDAPA 58.01.01.651 states that *"All reasonable precautions shall be taken to prevent particulate matter from becoming airborne. In determining what is reasonable, consideration will be given to factors such as the proximity of dust emitting operations to human habitations and/or activities and atmospheric conditions which might affect the movement of particulate matter..."* This requirement is applicable to all facilities and requires reasonable control of fugitive dust emissions at all times. If the permittee is not reasonably controlling fugitive dust emissions, they are out of compliance with the laws of the State of Idaho that they must comply with at all times. The requirement to take appropriate corrective action as expeditiously as practicable in Conditions A.3 and A.4 simply clarifies that the facility must take action to continuously comply with the law and does not place an additional requirement on the facility. It should be noted that failing to reasonably control fugitive emissions may constitute an excess emissions event whereupon appropriate corrective action must be initiated with all practicable speed (IDAPA 58.01.01.132).

Additionally, the Environmental Protection Agency, Region X (EPA) previously commented on these conditions stating that *"It isn't clear when the permittee must initiate corrective action. We suggest that the permittee initiate corrective action as soon as possible and no later than 24 hours after the complaint was received."* In general DEQ believes that taking corrective action within 24 hours of receiving a valid complaint or determining that fugitive particulate emissions are not being reasonably controlled meets the intent of this requirement. However, it is understood that, depending on the circumstances, immediate action or a longer time period may be necessary.

**Comment A.6:** There is also no applicable legal requirement to *"take appropriate corrective action*

**Comment A.19:** Idaho has not obtained delegation to administer the new source performance standards, so there is no applicable legal requirement for permittees to submit notices to DEQ under 40 CFR Part 60. Neither EPA nor the state may add requirements to the NSPS in an operating permit other than gap-filling monitoring requirements. The second sentence in Condition A.19 should be deleted.

**DEQ Response:** The permit has not been changed to reflect this comment. Although Idaho has not obtained delegation to administer the new source performance standards, the title V program does require the incorporation of all applicable requirements into the permit to operate, including the new source performance standards (40 CFR 70.3(c)(1)). Also, Idaho's rules incorporate the new source performance standards by reference in IDAPA 58.01.01.107.03.h, making them state enforceable as well. 40 CFR Part 70.1 states that *"All sources subject to these regulations shall have a permit to operate that assures compliance by the source with all applicable requirements. While title V does not impose substantive new requirements, it does require that fees be imposed on sources and that certain procedural measures be adopted especially with respect to compliance."* IDAPA 58.01.01.322.08. states *" All Tier I operating permits shall incorporate by reference all applicable requirements regarding reporting and require all of the following: a. Sufficient reporting to assure compliance with all of the terms and conditions of the Tier I operating permit..."* Therefore, to assure that the facility is in compliance with the requirement to submit notices as specified in 40 CFR 60.4, DEQ is requiring that a copy of the notice(s) be sent to DEQ.

**Comment A.19 - A.27** Conditions A.19-27 are inappropriate facility-wide conditions and should be deleted. New source performance standards (NSPS) apply only to very specific categories of "affected facilities" defined by EPA. NSPS are in no way requirements of general applicability like fugitive dust or odor that generally apply across regulated entities and to all emissions units at a facility with few exceptions. ...these brand new terms are not "proposed wording changes [that] clarify, but do not change, the substantive meaning of the requirements..." as represented in the MartzEmerson letter dated August 3, 2000. They are new, purportedly facility-wide NSPS conditions (which include conditions that may never be applicable to any source) without any anchoring reference to specific units or affected facilities, alternative operating scenarios, or advance approvals. The result is very confusing.

In sum, for the reasons explained above, DEQ should not include Conditions 19-27 in the facility wide conditions section of the Tier I permits. ...NSPS should be included only where applicable to affected facilities and only in the section of the permit governing those affected facilities subject to a standard.

**DEQ Response:** The permit has not been changed to reflect this comment. As indicated in the facility-wide section of the permit in bold type just before Condition A.18, Conditions A.18 through A.26 only apply to NSPS sources at the facility. DEQ understands that these requirements do not apply to all emission units at the facility, but they are generally applicable to all NSPS affected sources. If a facility does not have any NSPS affected units, these conditions will not be placed in the permit. DEQ considered placing these generally applicable NSPS requirements in each source specific section containing NSPS affected units. However, considering previous comments, DEQ decided that to repeat these generally applicable requirements in several sections of the permit may make the permit confusing and rather large. Therefore, DEQ decided to place them in the facility wide section of the permit so long as it is clear which emission units in the permit are NSPS affected. This is accomplished in the source specific sections of the permit. It should be noted, as with all requirements, a source has the ability to request a nonapplicability determination if they feel that the requirement does not apply to them. There was

no such request from this permittee.

**Comment Insig. Activities:**

Binding federal law does not require that insignificant emissions units be included in the permit application or the permit content. Idaho Code §39-115 explicitly states that insignificant emission units shall not be required to have a permit to construct or a permit to operate. No federal or state law conditions the granting of a permit shield on listing insignificant emissions units in the permit.

In light of the foregoing, the following statements contained in the permits are inaccurate and should be deleted,

> Activities and emission units identified as insignificant under IDAPA 58.01.01.317.01.b are required to be listed in the Tier I OP to qualify for a permit shield. (Avista)
>
> Activities and emission units identified as exempted under IDAPA 317.01.b are required to be listed in the Tier I OP to qualify for a permit shield. (Chevron)

In addition, Conditions C.1 (Avista) and F.1 (Chevron) should be deleted since they contain no applicable requirements and are therefore unnecessary.

**DEQ Response:**

The permit has not been changed in response to this comment. IDAPA 58.01.01.317.01.b.i specifically states: *"This section contains lists of units or activities that are insignificant on the basis of size or production rate. **Units and activities listed in this section must be listed in the permit application....**"* [emphasis added]. Therefore, for insignificant activities claimed under section 317.01.b, the permittee is required to include them in the permit application.

The commentor is correct that there is no law requiring that insignificant activities be listed in the permit. However, in order for the permittee to obtain a permit shield for emission units claimed to be insignificant under section 317.01.b, they must be listed in the permit in accordance with IDAPA 58.01.01.325. In the case of this permit, the applicant specifically requested that the listed units be included in the permit.

Condition C.1 (Avista) and Condition F.1 (Chevron) is to clarify that no additional requirements, other than the generally applicable facility-wide conditions in Section A of the permit, apply to the listed units, and remain in the permit.

# IACI Idaho Association of Commerce & Industry

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## FAX TRANSMISSION

TO: Ken Hanna FAX NUMBER: 373-0143

FROM: Brenda Mattson, Executive Assistant

NUMBER OF PAGES, INCLUDING COVER: 7

Martin Bauer from Micron asked that this by faxed to you.

IACI Idaho Association of Commerce & Industry

The Voice of Business in Idaho®

September 6, 2000

Gary Reinbold, M.A.
Air Quality Analyst
Department of Environmental Quality
1410 N. Hilton
Boise, ID. 83706-1255

Re: Docket 10AP-2016 (Avista) and Docket 10AP-2017 (Chevron)

Dear Mr. Reinbold:

The Idaho Association of Commerce and Industry (IACI) submits the following comments in response to DEQ's request for comment on the above-named Tier I operating permits. IACI is the leading trade association of Idaho business of almost 300 members engaged in diverse industrial and commercial enterprises, including manufacturing. A large number of IACI members have applied to obtain Tier I operating permits as required by the Clean Air Act Amendments of 1990 and implementing state laws, and, therefore, have substantial interest in the provisions common to all permits.

As you know, in February 1997, at IACI's request, DEQ convened a working group to develop common permit terms and implementing principles. The group was modeled after an identical group formed by the Oregon Department of Environmental Quality. Participants included DEQ management, staff and legal counsel, EPA staff and counsel, IACI, Ashgrove Cement Co., J.R. Simplot Co., Micron Technology, Inc., Potlatch Corp., and PGT.

We greatly appreciated the formation of the working group and DEQ's effort to ensure that the facility-wide conditions satisfied the requirements of federal and state law sensibly and reasonably. A lot of good work was accomplished. On May 13, 1997, the working group, including DEQ, agreed to a final version of facility-wide conditions and implementing principles that would be employed in all Tier I permitting actions. A copy of the final version is attached. At the time, DEQ informed the group that the conditions and implementing principles satisfied federal requirements. DEQ's minutes from the working group meeting on November 5, 1997 indicate "EPA's impressions of the permit process and the permit program are favorable."

Nevertheless, in September and October 1998, and again in March and October 1999, DEQ revised the agreed upon facility-wide conditions. DEQ explained that revisions were made in response to EPA Region X comments. DEQ then proposed a number of Tier I permits for public comment that included facility-wide conditions reviewed and approved by EPA.

IACI made few comments on the revised facility-wide conditions proposed for comment. So far as we know, no other member of the public objected to the facility-wide conditions contained in the proposed permits. For its part, EPA Region X made a small number of comments on the facility-wide conditions in the form of suggestions, which in some cases lacked supporting applicable requirements and would require DEQ to undertake notice and comment rulemaking to implement. In short, the revised facility-wide conditions satisfied all applicable requirements and seemed to satisfy all interested parties.

Nevertheless, DEQ has undertaken another revision of the facility-wide conditions. According to DEQ, the latest (seventh) proposal is "in response to public and agency comments received on . . . Tier I operating permits." *Public notice signed by Margerie Martz Emerson dated August 3, 2000.* DEQ further explained that the "proposed wording changes clarify, but do not change, the substantive meaning of the requirements . . . ."

Title V, Part 70, and the state Administrative Procedure Act, however, do not authorize the state to "clarify" applicable requirements by rewriting the regulations or adding new substantive terms other than gap-filling monitoring requirements. Appalachian Power Co. v. EPA, 208 F.3d 1015, 1018 (D.C. Cir. 2000)(EPA periodic guidance directing states to clarify or modify monitoring requirements held arbitrary, an abuse of discretion, and a violation of the Administrative Procedure Act). Further, the NSPS excerpts added to the Avista and Chevron permits are not clarifications as represented by DEQ, but are brand new conditions not previously included in draft tier I permits. Regrettably, by adding new terms that are not applicable nor appropriate, DEQ has unnecessarily undone some of the prior collaborative work of the working group and, in some cases, violated the sate Administrative Procedure Act, I.C. § 67-5220, et seq.

IACI's comments on the specific conditions bear only on the facility-wide provisions and insignificant activities generally. The assumptions underlying our comments are that operating permits are designed only to specify, 1) the requirements that apply to the source, 2) periodic monitoring sufficient to yield reliable data for a representative period where the applicable requirement does not specify monitoring, and 3) that Part 70 does not impose new substantive requirements. IACI also recognizes that permittees may agree to specific provisions that are different from the conditions advocated by IACI on behalf of its members generally.

IACI's specific comments on the facility-wide and insignificant activities conditions proposed in Dockets 10AP-2016 and 10AP-2017 are as follows:

A. Facility-Wide Conditions (Avista and Chevron)

A.3 and A.4. There is no applicable legal requirement for a permittee to "take appropriate corrective action as expeditiously as practicable after a valid [dust] complaint is received" as proposed in A.3, or, "if fugitive dust is not being reasonably controlled, . . . take corrective

action as expeditiously as practicable" as proposed in A.4. Neither the current state regulations governing fugitive dust nor the EPA-approved state implementation plan (SIP)( 40 CFR 52.670) contain any such requirement. There are no such requirements in 40 CFR Part 51. Nor are these gap-filling monitoring requirements. The gap-filling is satisfied by the monitoring and recordkeeping requirements to maintain a log at condition A.3 and to conduct a quarterly inspection at condition A.4. -

A state may not unilaterally add new substantive requirements to operating permits other than gap-filling monitoring requirements. Appalachian Power Co. v. EPA, 208 F.3d 1015 (D.C. Cir. 2000). EPA may not require states to do so. Id. The substantive fugitive dust requirement based on current state law is condition A.1.[1] DEQ should, therefore, delete the second sentence in Condition A.3, and the second sentence in Condition A.4, which are inapplicable and inappropriate. IACI would not object, however, if DEQ stated in the technical analysis *its position is* that the permittee must "take appropriate corrective action as expeditiously as practicable after a valid complaint is received" or "if fugitive dust is not being reasonably controlled." However, the proposed requirements are not applicable and are inappropriate for inclusion in an enforceable permit.

A.6. There is also no applicable legal requirement that "the permittee shall take appropriate corrective action as expeditiously as practicable" if an odor complaint has merit. The state regulations governing odor and the EPA-approved SIP (40 CFR 52.670) contain no such requirement. Again, this is not a gap-filling monitoring requirement or required by 40 CFR Part 51. The gap-filling monitoring requirement is satisfied by the obligation to investigate complaints and maintain a log at condition A.6.

As noted above, a state may not unilaterally add new substantive requirements into operating permits other than gap-filling monitoring requirements. Appalachian Power Co. v. EPA, 208 F.3d 1015 (D.C. Cir. 2000). EPA may not require states to do so. Id. The substantive odor requirement based on current state law is condition A.5.[2] DEQ should, therefore, delete the second sentence in condition A.6, which is inapplicable and inappropriate. IACI would not object, however, if DEQ stated in the technical analysis *its position is* that the permittee must "take appropriate corrective action as expeditiously as practicable."

A.8. There is no applicable legal requirement to "take immediate corrective action to remedy the cause of the visible emissions" if "any visible emissions are visible from any point of emission." The state regulations governing opacity and the EPA-approved SIP (40 CFR 52.670) contain no such requirement. Visible emissions below applicable standards are not unlawful.

Again, this is not a gap-filling monitoring requirement or required by 40 CFR Part 51. The gap-filling monitoring requirement is satisfied by the obligation to conduct a Method 9 observation. The third sentence in A.8, therefore, should be deleted.

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[1] The fugitive dust rule in the SIP dates from 1979. DEQ has filed at least five requests to update the SIP that EPA has failed to act on within the time required by the Clean Air Act.

[2] The odor rule contained in the SIP dates from 1972.

As we agreed in the working group, there are a number of facilities that are extremely unlikely ever to violate the opacity standard even if visible emissions are present. Monitoring or reporting is pointless and a waste of time and money for these facilities. At the opposite extreme are facilities for which opacity is specifically applicable or have the potential to exceed the standard and should conduct Method 9 observations whenever visible emissions are present. There is a third category of sources that are in-between where periodic walk-arounds are all that is necessary with the option to conduct a Method 9 observation in the unusual case. These categories were agreed upon by DEQ in May 1997 and should be followed now as set forth in the Final Version, attached. In any case, the third sentence in A.8 is not applicable or valid gap-filling and should be deleted.

A.17. The following language should be added to the beginning of the first sentence, "If testing is required,". Notice to the Department is only required when the permittee is performing specific performance tests required by the permit.

A.19. Idaho has not obtained delegation to administer the new source performance standards, so there is no applicable legal requirement for permittees to submit notices to DEQ under 40 CFR Part 60. Neither EPA nor the state may add requirements to the NSPS in an operating permit other than gap-filling monitoring requirements. Appalachian Power Co. v. EPA, 208 F.3d 1015 (D.C. Cir. 2000). LACI would not object if DEQ requested in the technical analysis that the permittee provide courtesy copies of such notices, but it is not a legal requirement subject to sanctions for failing to comply. The second sentence in Condition A.19 should be deleted.

A.19-27. Conditions A.19-27 are inappropriate facility-wide conditions and should be deleted. New source performance standards (NSPS ) apply only to very specific categories of "affected facilities" defined by EPA. NSPS are in no way requirements of general applicability like fugitive dust or odor that generally apply across regulated entities and to all emissions units at a facility with few exceptions. DEQ recently recognized this principle when it adopted IDAPA 58.01.01.590, which provides, "[t]he owner or operator of any stationary source shall comply with 40 CFR Part 60 *as applicable to the stationary source." (emphasis added).* Even many general NSPS conditions do not apply to all affected facilities.

In the December 14, 1999, comments on Docket 10A-9916, Region X advised DEQ to first analyze whether the requirements at 40 CFR Part 60, Subpart A are applicable and then determine whether to address the requirement in the permit or the technical analysis. EPA went on to say that completed one-time requirements could be simply discussed in the technical analysis. EPA concluded by advising DEQ, "you should more thoroughly discuss Subpart A, and the applicable and inapplicable sections of the subpart, *in the technical analysis." (emphasis added).*

DEQ included extensive, selected excerpts of Part 60, Subpart A as facility-wide permit conditions 19-27 in the Avista permit, but failed to mention or explain its decision in the technical analysis. As noted above, these brand new terms are not "proposed wording changes [that] clarify, but do not change, the substantive meaning of the requirements . . ." as represented in the Martz Emerson letter dated August 3, 2000. They are new, purportedly facility-wide NSPS conditions (which include conditions that may never be applicable to any source) without

any anchoring reference to specific units or affected facilities, alternative operating scenarios, or advance approvals. The result is very confusing. In contrast, the technical analysis for the Chevron permit attempted to match the specific NSPS requirements to specific units, which illustrates the analysis that was required but omitted from the Avista permit analysis. By doing so, the analysis in the Chevron action demonstrates why NSPS are inappropriate for inclusion as facility-wide conditions unless a facility is composed entirely of sources subject to NSPS.

The Chevron analysis also references unspecified EPA guidance that was used to conduct the analysis. That document should have been identified by date and author if not included in the comment package. IACI has obtained a copy of an undated chart labeled "Kenneth Hanna-NSPS Subpart A Chart", which confirms that NSPS applicability should be performed case-by-case by affected facility and not on a facility-wide basis. IACI does not know what if any weight should be given to the chart or whether it can be fairly described as agency guidance.

In sum, for the reasons explained above, DEQ should not include Conditions 19-27 in the facility wide conditions section of Tier I permits. As with MACT requirements, NSPS should be included only where applicable to affected facilities and only in the section of the permit governing those affected facilities subject to a standard.

**C. Insignificant Activities** (Avista) and
**F. Insignificant Activities** (Chevron)

Binding federal law does not require that insignificant emissions units be included in the permit application or the permit content. Western States Petroleum v. EPA, 87 F.3d 280 (9th Cir. 1996). Idaho Code § 39-115 explicitly states that insignificant emission units shall not be required to have a permit to construct or a permit to operate. No federal or state law conditions the granting of a permit shield on listing insignificant emissions units in the permit.

In light of the foregoing, the following statements contained in the permits are inaccurate and should be deleted,

> Activities and emission units identified as insignificant under IDAPA 58.01.01.317.01.b are required to be listed in the Tier I OP to qualify for a permit shield. (Avista).
>
> Activities and emission units identified as exempted under IDAPA 317.01(b) are required to be listed in this permit to qualify for a permit shield. (Chevron).

In addition, Conditions C.1 (Avista) and F.1 (Chevron) should be deleted since they contain no applicable requirements and are therefore unnecessary.

From this latest proposal it appears that DEQ is not fully familiar with the basic principles of Title V of the Clean Air Act, 40 CFR Part 70, and governing administrative procedures. The process certainly is not efficient. This is frustrating to IACI members that have contributed a

significant amount of time, expense, and effort on this matter, that support the department, and who have been asked by DEQ for substantial program fee increases.

We are hopeful that these comments will help guide DEQ to write good permits designed only to specify, in a straight-forward way, the requirements that apply to the source, periodic monitoring sufficient to yield reliable data for a representative period where the applicable requirement does not specify monitoring, and no new substantive requirements unless agreed in advance by the permittee. Thank you for the opportunity to comment.

Respectfully,

J. Brent Olmstead, Vice-President Natural Resources
Idaho Association of Commerce and Industry